

# Work Order ID 98255

Tuesday, March 12, 2013 1:05:37 PM

**\*98255\***

Page 1

Item ID: D4500-1

Accept

**\*N9000040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Bell Door Header, LH

Stop

**\*NS2\***

Start Date: 3/12/2013 Start Qty: 5.00

**\*5\***

Cust Item ID:

Required Date: 3/29/2013 Req'd Qty: 5.00

**\*5\***

Customer:

Reference:

Approvals:

Process Plan:

*MF*

Date:

*13-3-12*

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D4500

*REV. D*

100

0.00

**\*100\***

Bandsaw

Memo

0.00

Jeaspa Bandsaw

CUT BLANK 25.00" LONG

*13-3-26*

*5*

110

0.00

**\*110\***

Purchasing

Memo

0.00

Purchasing

ISSUE P/O: *19474*  
TO WEJAY  
C OF C IS REQUIRED

*02 13/04/03 (5)*

*115 - Rev + Inspect*

*CONTS*

120

QC6- Inspect dimensions to drawing

0.00

**\*120\***

QC

Memo

0.00

Quality Control

*QAS 27*

*BS 28*

*SP 13-5-27*

*5*

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

**FAULT CATEGORY**

Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized
		<input type="checkbox"/> Over/Under tolerance
		<input type="checkbox"/> Part Incorrect
		<input type="checkbox"/> Part Lost/Missing
		<input type="checkbox"/> Part Moved
		<input type="checkbox"/> Positioned Wrong
		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other

**Work Order ID 98255****\*98255\***

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Tuesday, March 12, 2013 1:05:37 PM

Item ID: D4500-1

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Item Name: Bell Door Header, LH

Stop **\*NS2\***

Start Date: 3/12/2013 Start Qty: 5.00

**\*5\***

Cust Item ID:

Required Date: 3/29/2013 Req'd Qty: 5.00

**\*5\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\*****Sequence ID/  
Work Center ID****Operation  
Description****Set Up/  
Run Hours****Tool ID Tool # Plan Accept Reject Reject Insp.  
Code Qty Qty Number Stamp**

130

Chemical Conversion Coat per QSI005 4.1

0.00

**\*130\***

HandFinish

Memo

0.00

Hand Finishing

5 0 13-5-31

140

QC7-Inspect Chemical Conversion Coat

0.00

**\*140\***

QC

Memo

0.00

Quality Control

0.00  
13.5.31

5

150

Spray Painting per QSI005 4.2

0.00

**\*150\***

SprayPaint

Memo

0.00

Spray Painting

PRIME TEMPO GREY

125452

5 0 0 13-5-31

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

<b>Work Order:</b> _____  <b>Part No.</b> _____  <b>NCR No.</b> _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
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<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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**Work Order ID 98255****\*98255\***

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Tuesday, March 12, 2013 1:05:37 PM

Item ID: D4500-1

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Item Name: Bell Door Header, LH

Stop **\*NS2\***

Start Date: 3/12/2013 Start Qty: 5.00

**\*5\***

Cust Item ID:

Required Date: 3/29/2013 Req'd Qty: 5.00

**\*5\***

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

160

QC14- Inspect Spray Paint

0.00

**\*160\***

QC

Memo

0.00

Quality Control

200

Identify as per dwg & Stock Location **SCA**

0.00

**\*200\***

Packaging

Memo

0.00

Packaging

210

QC21- Final Inspection - Work Order Release

0.00

**\*210\***

QC

Memo

0.00

Quality Control

5x

SP  
13-6-2

13/6/4

13-04-3

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube <input type="checkbox"/></td> <td style="width:15%;">Crosstube <input type="checkbox"/></td> <td style="width:15%;">Water Jet <input type="checkbox"/></td> <td style="width:15%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
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Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
---	---	---

<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other	
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# Picklist Print

Tuesday, March 12, 2013 1:05:36 PM

Page 1  
T

Work Order ID: 98255

Parent Item: D4500-1

Parent Item Name: Bell Door Header, LH

Start Date: 3/12/2013

Required Date: 3/29/2013

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP revA 12.07.18 new issue EC verified by:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4500-1P Bell Door Header		Purchased	No				Each	0.0000		5			
M6061T6B2.000X08.000 6061-T6 BAR 2.00' X 8.00"		Purchased	No			100	f	12.0850	2.01	10.578947			

2L13-3-26

Location

Loc Qty

Loc Code

MAT005

12.085

123089

0.085

124443

12

125034

10.6

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

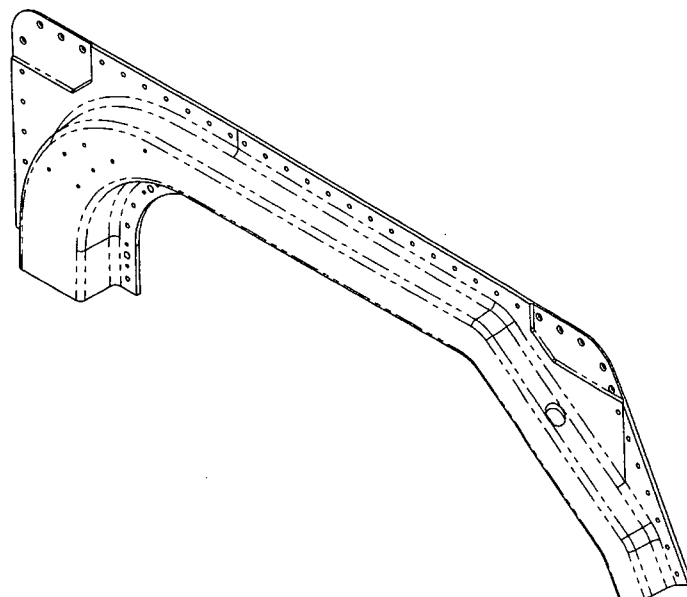
Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

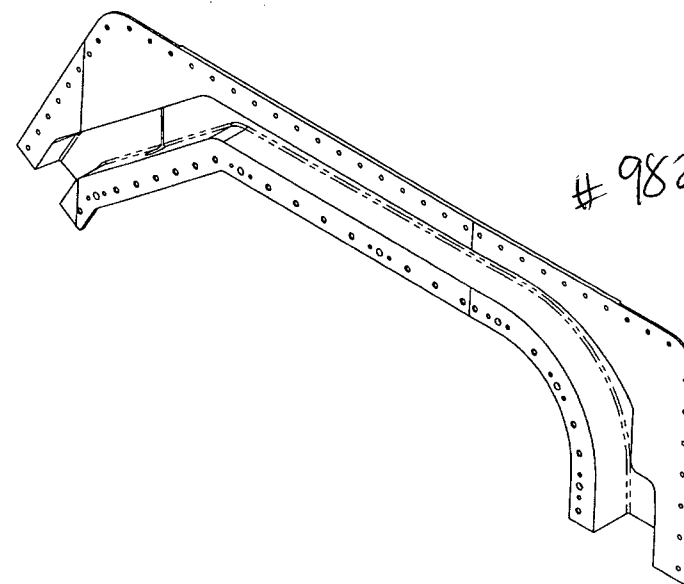
**FAULT CATEGORY**

Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
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<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized
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		<input type="checkbox"/> Part Incorrect
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		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other





**D4500-1 BELL DOOR HEADER (LH)**



# 98255

**RELEASED**  
2013-01-10

**NOTES:**

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR  
PER QQ-A-225/8 OR AMS-QQ-A-225/8  
(OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221  
REF DART SPEC M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
PRIME TEMPO GREY (4.2.1.3.2) PER DART QSI 005 4.2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.78 lbs
- 8) RAW MATERIAL SURFACE FINISH SUFFICIENT FOR THIS PART  
(NOT NECESSARY TO FACE MATERIAL).
- 9) ALL NON DIMENSIONED FEATURES PER CAD FILE "D4500-1-REVD.STP"

D	SEE SHT 2 ZONE C6 POCKET ADDED TO AFT AREA OF FLANGE SIMILAR TO THE POCKET ON THE FWD AREA OF THE FLANGE. DONE TO FACILITATE OPERATION OF DOOR MECHANISM SAME POCKET ADDED TO -2 PART.	AJS	12.12.03
C	ADDED -2 (RH CONFIGURATION), B8-3 0.38 DIM TYP OUTSIDE PATTERN NOTE DELETED (DRAFTING ERROR) C4-4 Ø0.129 THRU WAS Ø0.225 (DRAFTING ERROR) CSK WAS 0.170 SEE DETAIL C Ø0.201 HOLE WAS Ø0.194 (EXPANDED FOR FLOATING NUTPLATE).	AJS	12.10.10
B	COMPLETE REDESIGN.	AJS	12.09.11
A	NEW ISSUE	AJS	12.03.02
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	AR	DRAWING NO.	REV. D
MFG. APPR.	MD	D4500	SHEET 1 OF 8
APPROVED	MD	TITLE	SCALE
DE APPR.	MD	BELL DOOR HEADER	NTS
DATE	12.12.03	<small>COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE REPRODUCED OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

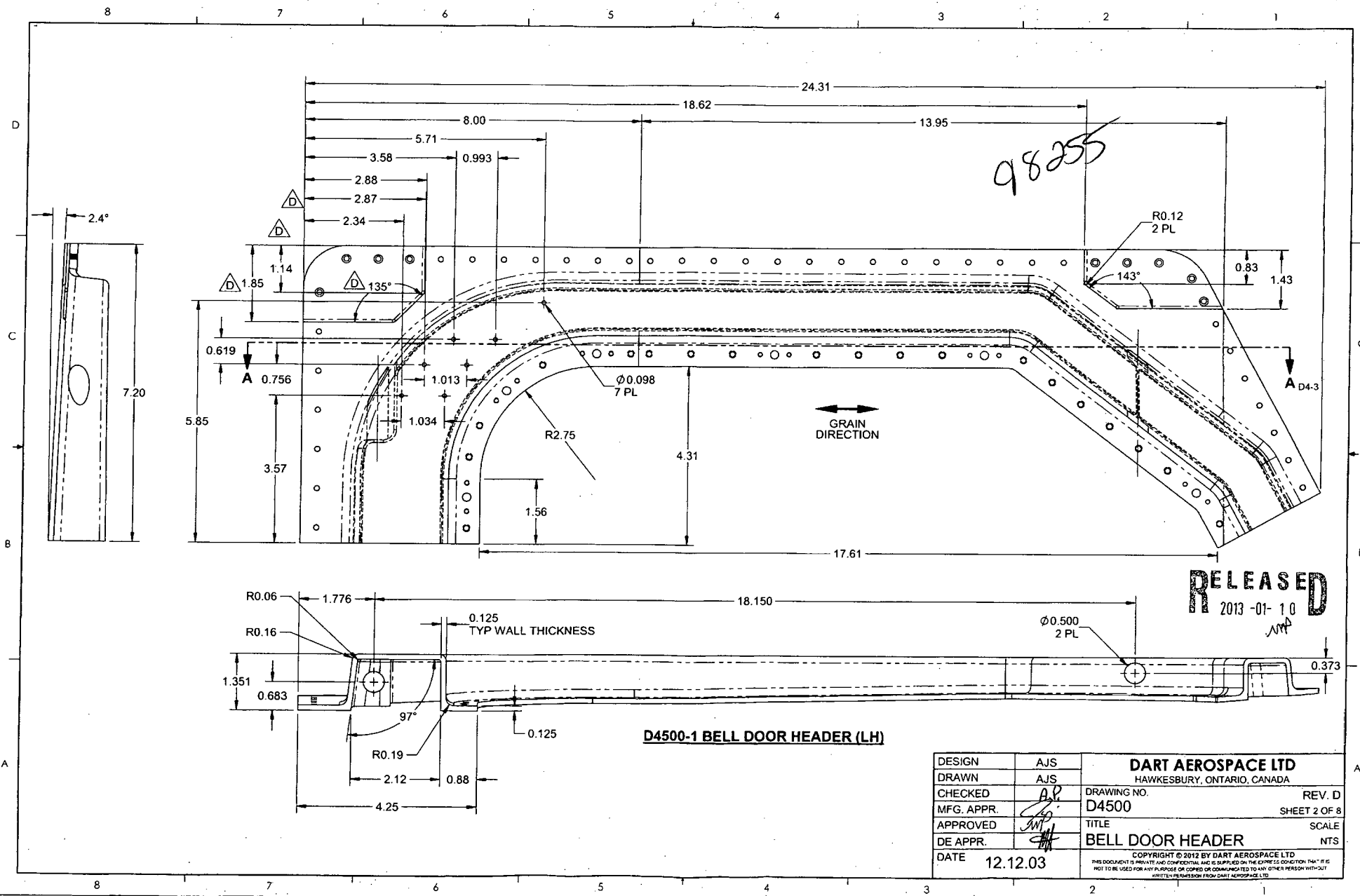
NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
<b>Root Cause</b>	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
<b>FAULT CATEGORY</b>											
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other		



RELEASED  
2013-01-10

D4500-1 BELL DOOR HEADER (LH)

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	AS	DRAWING NO.	REV. D
MFG. APPR.	AS	D4500	SHEET 2 OF 8
APPROVED	MP	TITLE	SCALE
DE APPR.	SH	BELL DOOR HEADER	NTS
DATE	12.12.03	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR TRANSMITTED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

**FAULT CATEGORY**

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other



NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

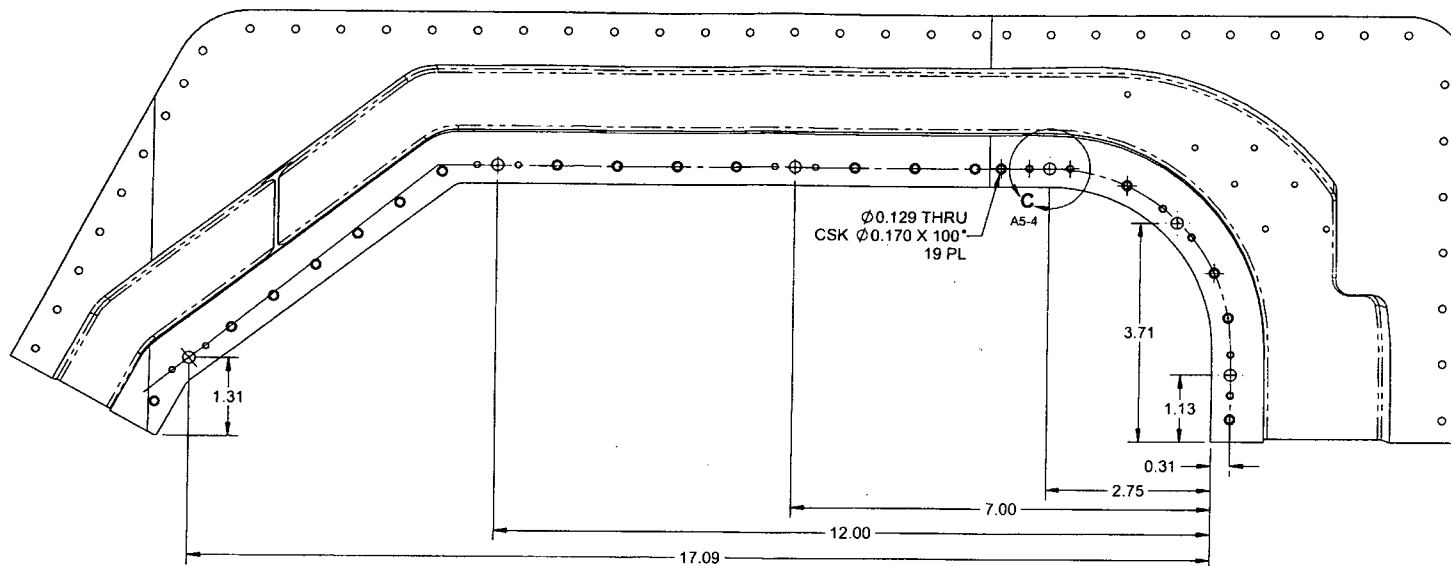
### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
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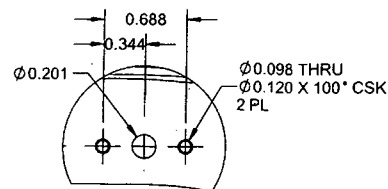
☐ Ovalized  
☐ Over/Under tolerance  
☐ Part Incorrect  
☐ Part Lost/Missing  
☐ Part Moved  
☐ Positioned Wrong  
☐ Power Loss/Surge

☐ Pressure/Forced  
☐ Temperature/Cure  
☐ Weld  
☐ Wrong Stock Pulled  
☐ Other

Q 8255



(SUPPLEMENTAL VIEW  
NUTPLATE LOCATIONS)



**DETAIL C** C3-4  
NUTPLATE HOLE DETAIL 6 PL  
SCALE 2X

**RELEASED**  
2013-01-10  
NP

DESIGN	AJS	<b>DART AEROSPACE LTD</b>	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AP	DRAWING NO.	REV. D
MFG. APPR.		<b>D4500</b>	SHEET 4 OF 8
APPROVED	WJ	TITLE	SCALE
DE APPR.		<b>BELL DOOR HEADER</b>	NTS
DATE	12.12.03	<small>COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

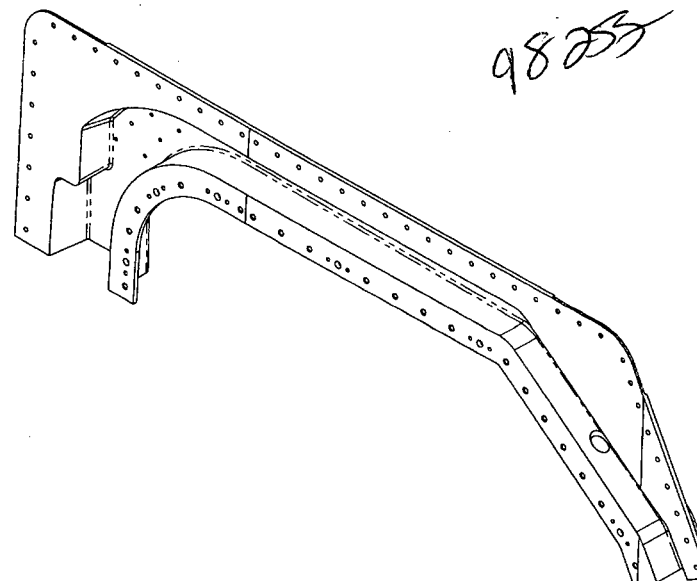
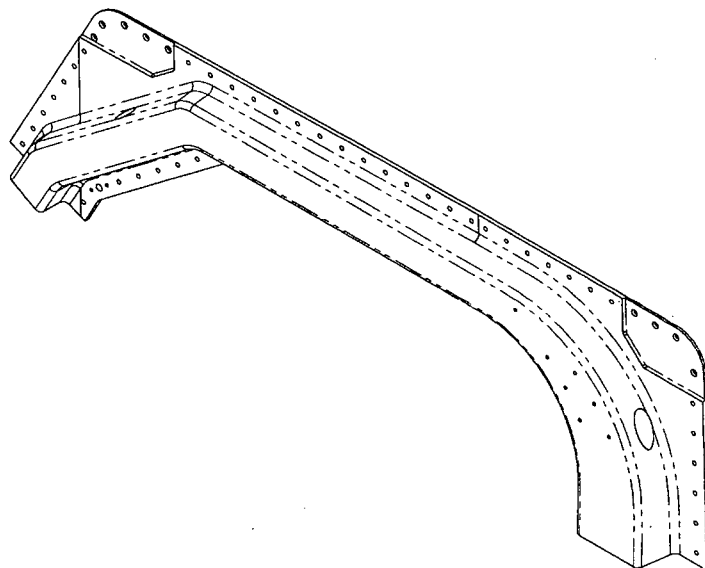
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
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<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other	
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**D4500-2 BELL DOOR HEADER (RH)**

**NOTES:**

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR  
PER QQ-A-225/8 OR AMS-QQ-A-225/8  
(OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221  
REF DART SPEC M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
PRIME TEMPO GREY (4.2.1.3.2) PER DART QSI 005 4.2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.78 lbs
- 8) RAW MATERIAL SURFACE FINISH SUFFICIENT FOR THIS PART  
(NOT NECESSARY TO FACE MATERIAL)
- 9) ALL NON DIMENSIONED FEATURES PER CAD FILE "D4500-2-REVD.STP"

**RELEASED**  
2013-01-10  
ND

DESIGN	AJS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	AP	DRAWING NO.	REV. D
MFG. APPR.	W	D4500	SHEET 5 OF 8
APPROVED	W	TITLE	SCALE
DE APPR.	W	BELL DOOR HEADER	NTS
DATE	12.12.03	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESSED CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

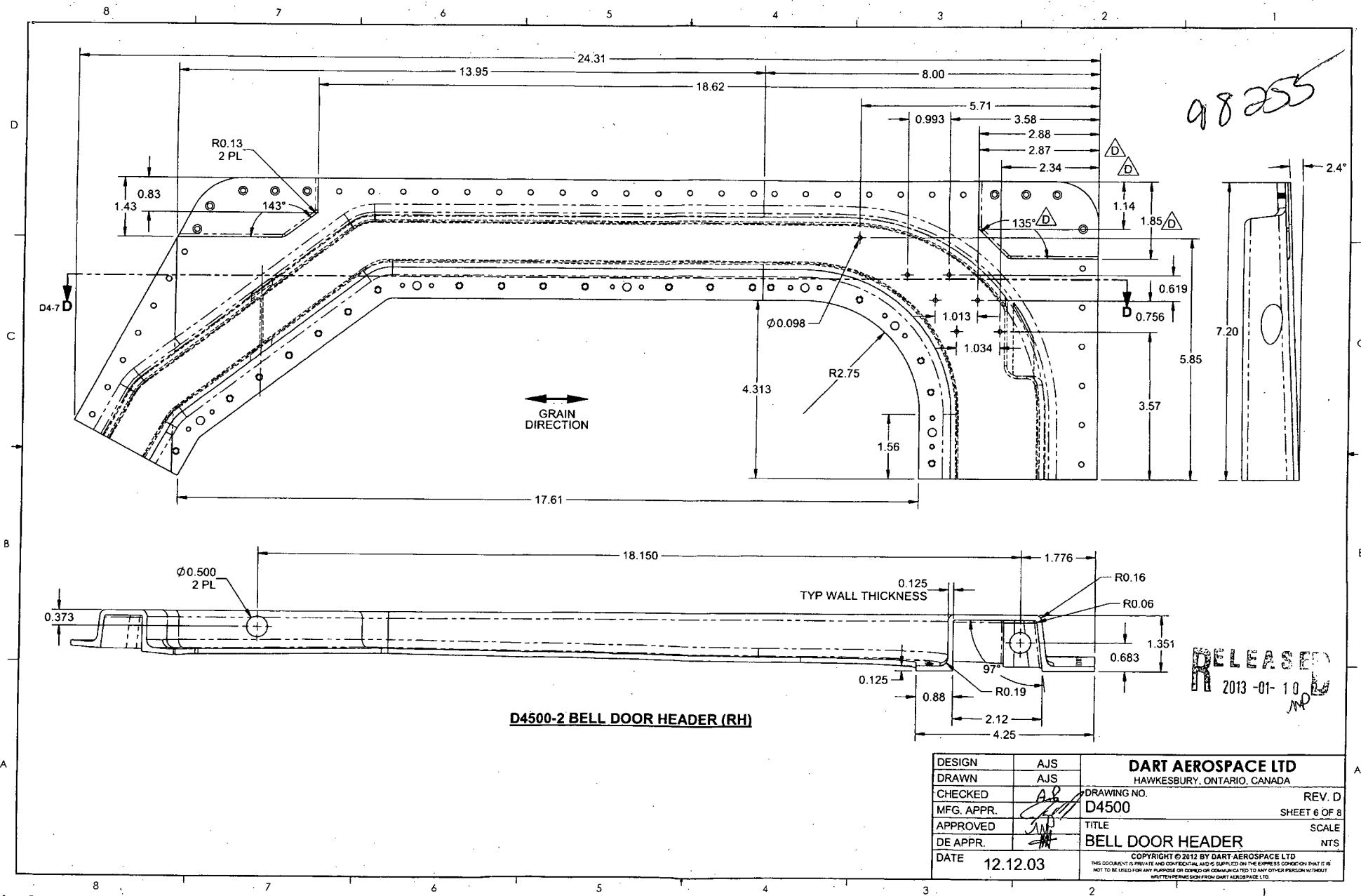
QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%; border: none;"> <tr> <td style="width: 25%;">Skid-tube <input type="checkbox"/></td> <td style="width: 25%;">Crosstube <input type="checkbox"/></td> <td style="width: 25%;">Water Jet <input type="checkbox"/></td> <td style="width: 25%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other



NCR: Yes / No

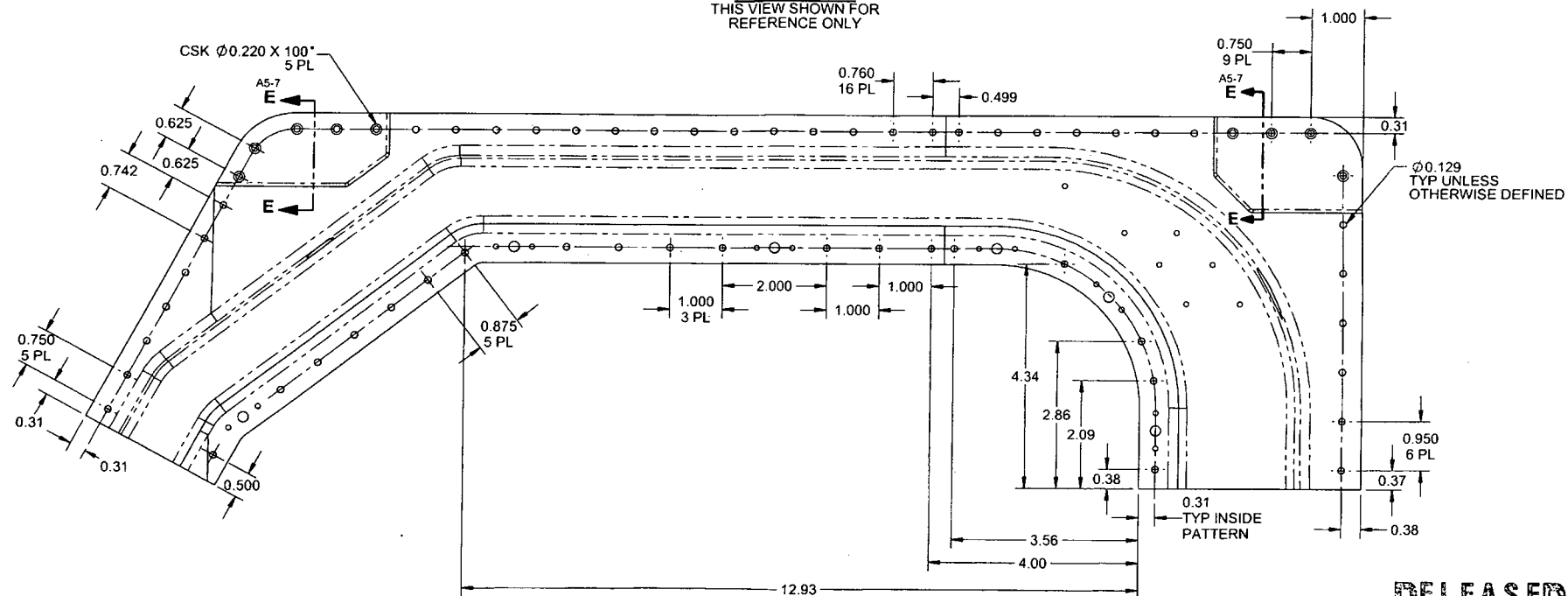
**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____				<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>					
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Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
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Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
<b>FAULT CATEGORY</b>											
<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Other		

**SECTION D-D** C8-6  
THIS VIEW SHOWN FOR  
REFERENCE ONLY



(SUPPLEMENTAL VIEW)

**SECTION E-E** C7-7  
C2-7

**RELEASED**  
2013-01-10

DESIGN	AJS	<b>DART AEROSPACE LTD</b>	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. D
MFG. APPR.	<i>[Signature]</i>	<b>D4500</b>	SHEET 7 OF 8
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	<b>BELL DOOR HEADER</b>	NTS
DATE	12.12.03	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

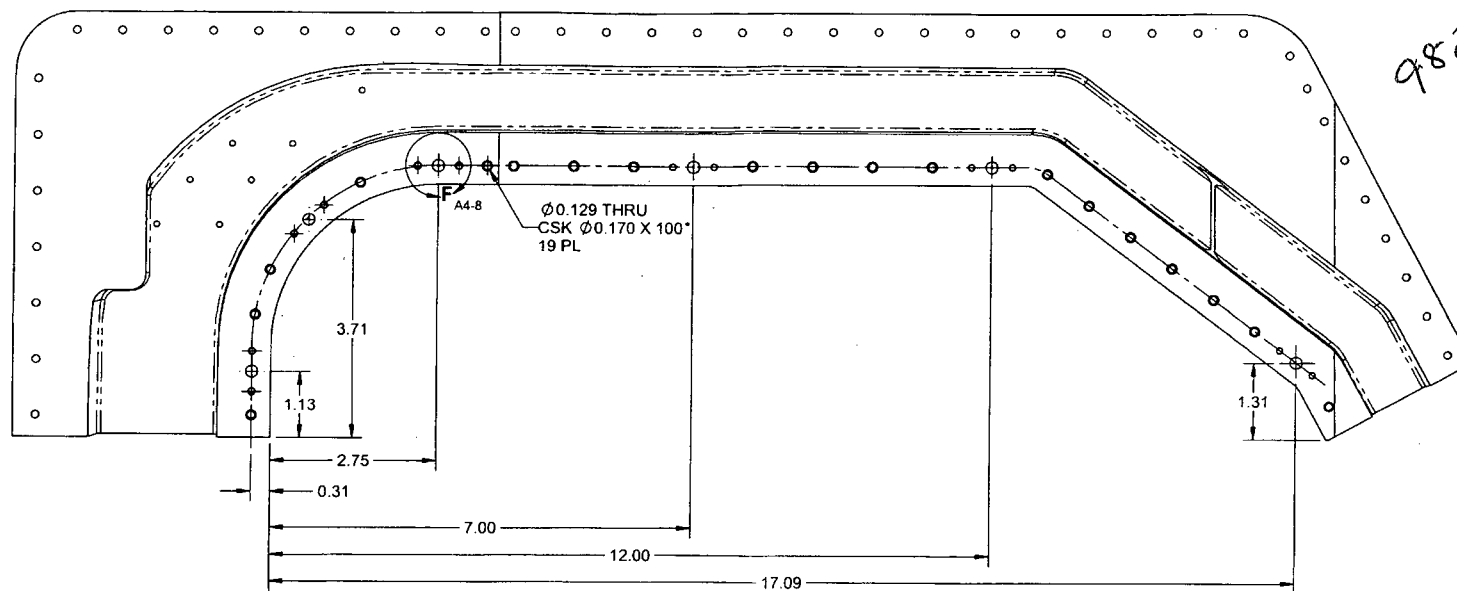
Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

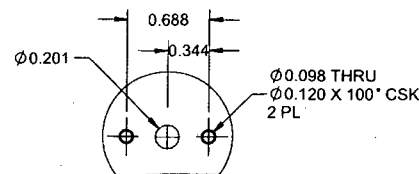
### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
---	---	---

<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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(SUPPLEMENTAL VIEW  
NUTPLATE LOCATIONS)



**DETAIL F** C6-8  
NUTPLATE HOLE DETAIL 6 PL  
(SCALE 2X)

RELEASED  
2013-01-10

DESIGN	AJS	<b>DART AEROSPACE LTD</b>	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AJS	DRAWING NO.	REV. D
MFG. APPR.		<b>D4500</b>	SHEET 8 OF 8
APPROVED		TITLE	SCALE
DE APPR.		<b>BELL DOOR HEADER</b>	NTS
DATE	12.12.03	<small>COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

**FAULT CATEGORY**

Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabelled
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized
		<input type="checkbox"/> Over/Under tolerance
		<input type="checkbox"/> Part Incorrect
		<input type="checkbox"/> Part Lost/Missing
		<input type="checkbox"/> Part Moved
		<input type="checkbox"/> Positioned Wrong
		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other





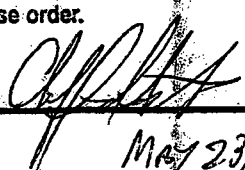
Packing Slip 36234

600 O'CONNOR DRIVE, KINGSTON, ONTARIO K7P 1N3  
TEL: 613-384-1662 FAX: 613-384-2997  
www.wejay.com

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Dart Aerospace  
1270 Aberdeen Street  
Hawkesbury ON K6A 1K7

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Dart Aerospace  
1270 Aberdeen Street  
Hawkesbury ON K6A 1K

INVOICE DATE	YOUR ORDER NO.	DATE ORDERED	SHIPPED VIA
	PO19474	03/31/13	Best way
CUSTOMER CODE	PROV. LIC. NO.	Extra <input type="checkbox"/> Exempt <input type="checkbox"/>	TERMS
DART			

QUANTITY ORDERED	B.O.	QUANTITY SHIPPED	DESCRIPTION	UNIT PRICE	AMOUNT
5	0	5	Fabricate bell door header as per drawing D4500 Rev. D D4500-1P B98255		
Required by: May 15, 2013					
<b>RELEASE NOTE</b> I certify that the items listed hereon have been inspected and tested and conform to all specifications and requirements in the contract or purchase order. Inspection Supervisor  WMP 03 May 23, 2013					
				G.S.T.	
				P.S.T.	

ORDER: COMPLETE ☐  
PARTIAL ☐

TOTAL

RECEIVED BY \_\_\_\_\_  
5% PER MONTH (18% PER ANNUM)  
CHARGED ON OVERDUE ACCOUNTS

NO GOODS RETURNED WITHOUT  
PRIOR AUTHORIZATION

SP13527

**Chantal Lavoie**

---

**From:** Scott Dennis <[scott@wejay.com](mailto:scott@wejay.com)>  
**Sent:** April 24, 2013 2:44 PM  
**To:** Chantal Lavoie  
**Cc:** Ed Jansen  
**Subject:** Door headers

Hi Chantal, Ed and I were looking at our production schedule for the 5 axis machines. In order to fulfill the current order for the deflectors for may 3rd we have to bump the outstanding orders for the door headers. Could we set the delivery date for May 16?

Let me know what would be possible.  
Thank you.

Scott Dennis  
Wejay Machine Products Co. Ltd.  
613-384-1662  
[scott@wejay.com](mailto:scott@wejay.com)



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO19474**

Purchase Order Date 4/03/13

PO Print Date 4/03/13

Page Number 1 of 1

**Order From :**

VC-WMP001

WEJAY MACHINE PRODUCTS CO. LTD  
600 O'CONNOR DRIVE  
KINGSTON, ONTARIO K7P 1N3  
CANADA

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	613-384-1662	Requisition Nbr	
Vendor Fax	613-384-2997	Tax Resale Nbr	10127-2607
Vendor Account Nbr		Terms	COD
		Currency	CAD
		FOB	Destination-Collect

Ship To : DART AEROSPACE LTD 1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**FOXED**  
6/13/10/3

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1	D4500-1P	Bell Door Header	4/24/13 Yes	✓ 5.00 Each	FedEx PI collect	\$1,028.0000	\$5,140.00

Special Inst: AS PER DWG D4500 REV. D  
B98255

PLEASE ADVISE DELIVERY

PO Total: \$5,140.00

CERTIFICATE OF CONFORMITY  
REQ'D UPON DELIVERY

Change Nbr: 1

Change Date: 4/03/13

No substitution or deviation without  
consent.  
Certificate of Conformity or Material  
Certification required - YES NO



600 O'CONNOR DRIVE, KINGSTON, ONTARIO K7P 1N3

PHONE: (613) 384-1662

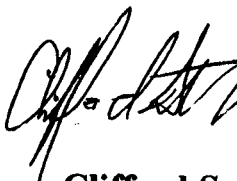
FAX: (613) 384-2997

## CERTIFICATE OF COMPLIANCE

CUSTOMER: Dart Aerospace Ltd.		DATE: May 23 2013	
		P.O.# PO19474	
		WEJAY JOB# 36234	
<p>I hereby certify that the following material has been inspected/tested and conforms to the requirements and specifications as stated in your contract and as noted below. Any exceptions will be listed as NCR items.</p>			
PART NO.	QTY.	PROCESS (ES)	SPECIFICATION / REV
D4500-1P 'Bell Door Header (LH)'	5	Machined complete per drawing req'ts.	D4500 / rev. D
Note: 1) Material supplied by 'Dart Aerospace'			

Records of Inspection/Test will be retained for 5 years minimum.

Yours truly,

  
**Clifford Smith**  
Authorized Q.A. Signatory





Customer Dart Aerospace Ltd. Customer P.O. P017497  
 Drawing # D4500 Drawing rev D  
 Part Number D4500-1 P E.C.O. --  
 Part Name Bell Door Header (LH) Material Alum. Alloy 6061-T6511  
 Serial # 001 Inspected by Cliff Smith  
 Job # 36234 Signature:

WMP  
03

ACCEPTED

ZEISS



## Overall Result

All Characteristics: 299  
 Out of tolerance: 0  
 Over Warning Limit: 0  
 Not Calculated: 0

Comment: Note: Material supplied by DART Aerospace Ltd

1st ARTICLE

Feature	ID	Actual	Nominal	Pos Tol.	Neg Tol.	Deviation	<-- -->
1 2_C8	Y	-7.1988	-7.2000	0.0300	-0.0300	0.0012	-
Inside bott. face_flat	GDT Flat	0.0017	0.0000	0.0100		0.0017	-
2 2_A6	X	-4.2469	-4.2500	0.0300	-0.0300	0.0031	-
3 2_B3_X	Dist	17.6122	17.6100	0.0300	-0.0300	0.0022	-
3a 2_B4	CartDist	4.3135	4.3100	0.0300	-0.0300	0.0035	-
4 2_A7	Z	1.3528	1.3510	0.0100	-0.0100	0.0018	-
5 2_A6_X	Dist	0.8790	0.8800	0.0300	-0.0300	-0.0010	-
6 2_A6_X	Dist	2.1210	2.1200	0.0300	-0.0300	0.0010	-
7 2_A6	A	96.9475	97.0000	0.5000	-0.5000	-0.0525	-
8 2_B5_Y	Dist	1.5649	1.5600	0.0300	-0.0300	0.0049	-
9 2_C5	R	2.7512	2.7500	0.0300	-0.0300	0.0012	-
10a 2_B2	D	0.5000	0.5000	0.0060	-0.0010	0.0000	---
10b 2_B2	D	0.5004	0.5000	0.0060	-0.0010	0.0004	---
11 2_B7	X	-1.7725	-1.7760	0.0100	-0.0100	0.0035	--
12 2_A7	Z	-0.6832	-0.6830	0.0100	-0.0100	-0.0002	-
13 2_B1	Z	0.3727	0.3730	0.0100	-0.0100	-0.0003	-
14 2_B4	X	-18.1519	-18.1500	0.0100	-0.0100	-0.0019	-
15a 2_C5	D	0.0977	0.0980	0.0040	-0.0010	-0.0003	---
16 2_D7	X	-2.3398	-2.3400	0.0300	-0.0300	0.0002	-
17a 2_B7	Y	3.5706	3.5700	0.0300	-0.0300	0.0006	-
15b 2_C5	D	0.0978	0.0980	0.0040	-0.0010	-0.0002	---
17b 2_B7	Y	3.5709	3.5700	0.0300	-0.0300	0.0009	-
18 2_C6_X	Dist	1.0345	1.0340	0.0100	-0.0100	0.0005	-
15c 2_C5	D	0.0977	0.0980	0.0040	-0.0010	-0.0003	---
19 2_D6	X	-2.8807	-2.8800	0.0300	-0.0300	-0.0007	-
20a 2_C7_Y	Dist	0.7568	0.7560	0.0100	-0.0100	0.0008	-
15d 2_C5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	---
20b 2_C7_Y	Dist	0.7569	0.7560	0.0100	-0.0100	0.0009	-
21 2_C6_X	Dist	1.0136	1.0130	0.0100	-0.0100	0.0006	-
15e 2_C5	D	0.0977	0.0980	0.0040	-0.0010	-0.0003	---
22 2_D6	X	-3.5748	-3.5800	0.0300	-0.0300	0.0052	-
23a 2_C7_Y	Dist	0.6189	0.6190	0.0100	-0.0100	-0.0001	-

Measurement Plan D4500 rev PB2

Date May 22, 2013

2



Part Number D4500-1 P

Serial# 001

Time 1:36:45 pm

Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<-- -->
15f 2_C5	D	0.0978	0.0980	0.0040	-0.0010	-0.0002	---
23b 2_C7_Y	Dist	0.6191	0.6190	0.0100	-0.0100	0.0001	-
24 2_D6_X	Dist	0.9929	0.9930	0.0100	-0.0100	-0.0001	- -
15g 2_C5	D	0.0979	0.0980	0.0040	-0.0010	-0.0001	---
25 2_D6	X	-5.7095	-5.7100	0.0300	-0.0300	0.0005	-
26 2_C7	Y	5.8463	5.8500	0.0300	-0.0300	-0.0037	- -
27 2_D8	A2	2.3697	2.4000	0.5000	-0.5000	-0.0303	- -
28 2_D4	X	-24.3040	-24.3100	0.0300	-0.0300	0.0060	-
29 2_D4	A1	-1.0108	-1.0000	0.5000	-0.5000	-0.0108	- -
30 3_D1	A1	-3.7480	-3.7000	0.5000	-0.5000	-0.0480	- -
31a 3_C8	D	0.1285	0.1290	0.0050	-0.0010	-0.0005	---
32a 3_B7	X	-0.3718	-0.3800	0.0300	-0.0300	0.0082	-
33 3_B7	Y	0.3728	0.3700	0.0300	-0.0300	0.0028	-
31b 3_C8(1)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31b 3_C8(2)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31b 3_C8(3)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31b 3_C8(4)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31b 3_C8(5)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31b 3_C8(6)	D	0.1288	0.1290	0.0050	-0.0010	-0.0002	---
32b 3_B7(1)	X	-0.3729	-0.3800	0.0300	-0.0300	0.0071	-
32b 3_B7(2)	X	-0.3729	-0.3800	0.0300	-0.0300	0.0071	-
32b 3_B7(3)	X	-0.3729	-0.3800	0.0300	-0.0300	0.0071	-
32b 3_B7(4)	X	-0.3729	-0.3800	0.0300	-0.0300	0.0071	-
32b 3_B7(5)	X	-0.3728	-0.3800	0.0300	-0.0300	0.0072	-
32b 3_B7(6)	X	-0.3726	-0.3800	0.0300	-0.0300	0.0074	-
34 3_B7(1)	Y	0.9486	0.9500	0.0300	-0.0300	-0.0014	- -
34 3_B7(2)	Y	1.0085	1.9000	0.0300	-0.0300	-0.0015	- -
34 3_B7(3)	Y	2.9087	2.8500	0.0300	-0.0300	-0.0013	- -
34 3_B7(4)	Y	3.7986	3.8000	0.0300	-0.0300	-0.0014	- -
34 3_B7(5)	Y	4.7485	4.7500	0.0300	-0.0300	-0.0015	- -
34 3_B7(6)	Y	5.6987	5.7000	0.0300	-0.0300	-0.0013	- -
31c 3_C8	D	0.1287	0.1290	0.0050	-0.0010	-0.0003	---
35 3_D7	X	0.9978	-1.0000	0.0100	-0.0100	0.0022	-
36a 3_B1	Y	-0.3086	-0.3100	0.0300	-0.0300	0.0014	-
31d 3_C8(1)	D	0.1287	0.1290	0.0050	-0.0010	-0.0003	---
31d 3_C8(2)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31d 3_C8(3)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31d 3_C8(4)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31d 3_C8(5)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31d 3_C8(6)	D	0.1285	0.1290	0.0050	-0.0010	-0.0005	---
31d 3_C8(7)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31d 3_C8(8)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31d 3_C8(9)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
37 3_D7(1)	X	-0.7501	-0.7500	0.0010	-0.0010	-0.0001	- -
37 3_D7(2)	X	-1.5601	-1.5000	0.0010	-0.0010	-0.0001	- -



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Part Number D4500-1 P

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Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<-- -->
37 3_D7(3)	X	-2.2501	-2.2500	0.0010	-0.0010	-0.0001	-
37 3_D7(4)	X	-3.0000	-3.0000	0.0010	-0.0010	0.0000	-
37 3_D7(5)	X	-3.7500	-3.7500	0.0010	-0.0010	0.0000	-
37 3_D7(6)	X	-4.5000	-4.5000	0.0010	-0.0010	0.0000	-
37 3_D7(7)	X	-5.2499	-5.2500	0.0010	-0.0010	0.0001	-
37 3_D7(8)	X	-5.9999	-6.0000	0.0010	-0.0010	0.0001	-
37 3_D7(9)	X	-6.7499	-6.7500	0.0010	-0.0010	0.0001	-
36b 3_B1(1)	Y	-0.3091	-0.3100	0.0300	-0.0300	0.0009	-
36b 3_B1(2)	Y	-0.3097	-0.3105	0.0300	-0.0300	0.0009	-
36b 3_B1(3)	Y	-0.3102	-0.3111	0.0300	-0.0300	0.0009	-
36b 3_B1(4)	Y	-0.3107	-0.3116	0.0300	-0.0300	0.0010	-
36b 3_B1(5)	Y	-0.3110	-0.3122	0.0300	-0.0300	0.0012	-
36b 3_B1(6)	Y	-0.3114	-0.3127	0.0300	-0.0300	0.0013	-
36b 3_B1(7)	Y	-0.3120	-0.3133	0.0300	-0.0300	0.0013	-
36b 3_B1(8)	Y	-0.3124	-0.3138	0.0300	-0.0300	0.0014	-
36b 3_B1(9)	Y	-0.3129	-0.3144	0.0300	-0.0300	0.0015	-
31e 3_C8	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
38 3_C5	X	-0.4089	-0.4990	0.0100	-0.0100	0.0001	-
36c 3_B1	Y	-0.3140	-0.3100	0.0300	-0.0300	-0.0040	-
31f 3_C8(1)	D	0.1285	0.1290	0.0050	-0.0010	-0.0005	---
31f 3_C8(2)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(3)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(4)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(5)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(6)	D	0.1285	0.1290	0.0050	-0.0010	-0.0005	---
31f 3_C8(7)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(8)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(9)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(10)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(11)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(12)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(13)	D	0.1285	0.1290	0.0050	-0.0010	-0.0005	---
31f 3_C8(14)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(15)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(16)	D	0.1287	0.1290	0.0050	-0.0010	-0.0003	---
36d 3_B1(1)	Y	-0.3127	-0.3150	0.0300	-0.0300	0.0023	-
36d 3_B1(2)	Y	-0.3126	-0.3155	0.0300	-0.0300	0.0029	-
36d 3_B1(3)	Y	-0.3125	-0.3160	0.0300	-0.0300	0.0035	-
36d 3_B1(4)	Y	-0.3124	-0.3164	0.0300	-0.0300	0.0040	-
36d 3_B1(5)	Y	-0.3124	-0.3169	0.0300	-0.0300	0.0045	-
36d 3_B1(6)	Y	-0.3123	-0.3174	0.0300	-0.0300	0.0050	-
36d 3_B1(7)	Y	0.3122	-0.3179	0.0300	-0.0300	0.0056	-
36d 3_B1(8)	Y	-0.3121	-0.3183	0.0300	-0.0300	0.0062	-
36d 3_B1(9)	Y	-0.3121	-0.3188	0.0300	-0.0300	0.0067	-
36d 3_B1(10)	Y	-0.3121	-0.3193	0.0300	-0.0300	0.0072	-



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Part Number D4500-1 P

Serial # 001

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Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<- -->
36d 3_B1(11)	Y	-0.3120	-0.3198	0.0300	-0.0300	0.0078	-
36d 3_B1(12)	Y	-0.3120	-0.3202	0.0300	-0.0300	0.0083	-
36d 3_B1(13)	Y	-0.3120	-0.3207	0.0300	-0.0300	0.0087	-
36d 3_B1(14)	Y	-0.3119	-0.3212	0.0300	-0.0300	0.0093	-
36d 3_B1(15)	Y	-0.3117	-0.3217	0.0300	-0.0300	0.0100	-
36d 3_B1(16)	Y	-0.3116	-0.3221	0.0300	-0.0300	0.0105	-
39 3_C5(1)	X	-0.7609	-0.7600	0.0100	-0.0100	-0.0009	-
39 3_C5(2)	X	-1.5210	-1.5200	0.0100	-0.0100	-0.0010	-
39 3_C5(3)	X	-2.2310	-2.2800	0.0100	-0.0100	-0.0010	-
39 3_C5(4)	X	-3.0409	-3.0400	0.0100	-0.0100	-0.0009	-
39 3_C5(5)	X	-3.8510	-3.8000	0.0100	-0.0100	-0.0010	-
39 3_C5(6)	X	-4.5610	-4.5600	0.0100	-0.0100	-0.0010	-
39 3_C5(7)	X	-5.3209	-5.3200	0.0100	-0.0100	-0.0009	-
39 3_C5(8)	X	-6.0810	-6.0800	0.0100	-0.0100	-0.0010	-
39 3_C5(9)	X	-6.8410	-6.8400	0.0100	-0.0100	-0.0010	-
39 3_C5(10)	X	-7.6009	-7.6000	0.0100	-0.0100	-0.0009	-
39 3_C5(11)	X	-8.3609	-8.3600	0.0100	-0.0100	-0.0009	-
39 3_C5(12)	X	-9.1209	-9.1200	0.0100	-0.0100	-0.0009	-
39 3_C5(13)	X	-9.8808	-9.8800	0.0100	-0.0100	-0.0008	-
39 3_C5(14)	X	-10.6407	-10.6400	0.0100	-0.0100	-0.0007	-
39 3_C5(15)	X	-11.4006	-11.4000	0.0100	-0.0100	-0.0006	-
39 3_C5(16)	X	-12.1606	-12.1600	0.0100	-0.0100	-0.0006	-
31g 3_C8	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
36e 3_B1	X	0.3046	0.3100	0.0300	-0.0300	-0.0054	-
40 3_B1	Y	0.3094	0.3100	0.0300	-0.0300	-0.0006	-
31h 3_C8(1)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31h 3_C8(2)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31h 3_C8(3)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31h 3_C8(4)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31h 3_C8(5)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
36f 3_C8(1)	X	0.3053	0.3100	0.0300	-0.0300	-0.0047	-
36f 3_C8(2)	X	0.3062	0.3100	0.0300	-0.0300	-0.0038	-
36f 3_C8(3)	X	0.3067	0.3100	0.0300	-0.0300	-0.0033	-
36f 3_C8(4)	X	0.3074	0.3100	0.0300	-0.0300	-0.0026	-
36f 3_C8(5)	X	0.3078	0.3100	0.0300	-0.0300	-0.0022	-
41 3_B1(1)	Y	0.7505	0.7500	0.0100	-0.0100	0.0005	-
41 3_B1(2)	Y	1.5005	1.5000	0.0100	-0.0100	0.0005	-
41 3_B1(3)	Y	2.2507	2.2500	0.0100	-0.0100	0.0007	-
41 3_B1(4)	Y	3.0009	3.0000	0.0100	-0.0100	0.0009	-
41 3_B1(5)	Y	3.7510	3.7500	0.0100	-0.0100	0.0010	-
31i 3_C8	D	0.1286	0.1290	0.0100	-0.0100	-0.0004	-
36g 3_B1	X	0.3138	0.3100	0.0300	-0.0300	0.0038	-
42 3_C1	Y	0.7410	0.7420	0.0100	-0.0100	-0.0010	-
31j 3_C8	D	0.1291	0.1290	0.0100	-0.0100	0.0001	-
36h 3_B1	X	0.3138	0.3100	0.0300	-0.0300	0.0038	-

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Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<-- -->
43a 3_C1	Y	0.6253	0.6250	0.0100	-0.0100	0.0003	-
31k 3_C8	D	0.1291	0.1290	0.0100	-0.0100	0.0001	-
36i 3_B1	X	0.3130	0.3100	0.0300	-0.0300	0.0030	-
43b 3_C1	Y	0.6246	0.6250	0.0100	-0.0100	-0.0004	-
31L 3_C8	D	0.1287	0.1290	0.0050	-0.0010	-0.0003	---
44a 3_B7	X	0.3170	0.3100	0.0300	-0.0300	0.0070	-
45 3_B6	Y	0.3779	0.3800	0.0300	-0.0300	-0.0021	-
31m 3_C8	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
46 3_B6	Y	2.0985	2.1000	0.0300	-0.0300	-0.0015	-
44b 3_B7_R	Dist	0.3156	0.3100	0.0300	-0.0300	0.0056	-
31n 3_C8	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
47 3_B6	Y	2.8610	2.8600	0.0300	-0.0300	0.0010	-
44c 3_B7_R	Dist	0.3155	0.3100	0.0300	-0.0300	0.0055	-
31o 3_C8	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
48 3_B6	Y	4.3427	4.3400	0.0300	-0.0300	0.0027	-
44d 3_B7_R	Dist	0.3138	0.3100	0.0300	-0.0300	0.0038	-
31p 3_C8	D	0.1285	0.1290	0.0050	-0.0010	-0.0005	---
49 3_B6	X	-3.5650	-3.5700	0.0300	-0.0300	0.0050	-
44f 3_B7	Y	0.3116	0.3100	0.0300	-0.0300	0.0016	-
31q 3_C8	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
50 3_B6	X	-4.0024	-4.0000	0.0300	-0.0300	-0.0024	-
44g 3_B7	Y	0.3089	0.3100	0.0300	-0.0300	-0.0011	-
31r 3_C8(1)	D	0.1285	0.1290	0.0050	-0.0010	-0.0005	---
31r 3_C8(2)	D	0.1285	0.1290	0.0050	-0.0010	-0.0005	---
51a 3_C5(1)	X	-1.0001	-1.0000	0.0300	-0.0300	-0.0001	-
51a 3_C5(2)	X	-2.0002	-2.0000	0.0300	-0.0300	-0.0002	-
44h 3_B7(1)	Y	0.3091	0.3100	0.0300	-0.0300	-0.0009	-
44h 3_B7(2)	Y	0.3093	0.3100	0.0300	-0.0300	-0.0007	-
31rr 3_C8	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
52 3_C5_X	Dist	1.9995	2.0000	0.0100	-0.0100	-0.0005	-
44hh 3_B7	Y	0.3095	0.3100	0.0300	-0.0300	-0.0005	-
31s 3_C8(1)	D	0.1285	0.1290	0.0050	-0.0010	-0.0005	---
31s 3_C8(2)	D	0.1285	0.1290	0.0050	-0.0010	-0.0005	---
31s 3_C8(3)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
53 3_B5	X	-12.9294	-12.9300	0.0300	-0.0300	0.0006	-
51b 3_C5(1)	X	-1.0002	-1.0000	0.0300	-0.0300	-0.0002	-
51b 3_C5(2)	X	-2.0003	-2.0000	0.0300	-0.0300	-0.0003	-
51b 3_C5(3)	X	-3.0003	-3.0000	0.0300	-0.0300	-0.0003	-
44i 3_B7(1)	Y	0.3095	0.3100	0.0300	-0.0300	-0.0005	-
44i 3_B7(2)	Y	0.3097	0.3100	0.0300	-0.0300	-0.0003	-
44i 3_B7(3)	Y	0.3097	0.3100	0.0300	-0.0300	-0.0003	-
31t 3_C8	D	0.1286	0.1290	0.0300	-0.0300	-0.0004	-
44j 3_B7	CartDist	0.3073	0.3100	0.0300	-0.0300	-0.0027	-
31u 3_C9(1)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31u 3_C9(2)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---

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Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<-- -->
31u 3_C9(3)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31u 3_C9(4)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31u 3_C9(5)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
54 3_C3(1)	X	-0.8750	-0.8750	0.0300	-0.0300	0.0000	
54 3_C3(2)	X	-1.7502	-1.7500	0.0300	-0.0300	-0.0002	-
54 3_C3(3)	X	-2.6253	-2.6250	0.0300	-0.0300	-0.0003	-
54 3_C3(4)	X	-3.5004	-3.5000	0.0300	-0.0300	-0.0004	-
54 3_C3(5)	X	-4.3755	-4.3750	0.0300	-0.0300	-0.0005	-
44k 3_B7(1)	Y	0.3082	0.3100	0.0300	-0.0300	-0.0018	-
44k 3_B7(2)	Y	0.3083	0.3100	0.0300	-0.0300	-0.0017	-
44k 3_B7(3)	Y	0.3082	0.3100	0.0300	-0.0300	-0.0018	-
44k 3_B7(4)	Y	0.3081	0.3100	0.0300	-0.0300	-0.0019	-
44k 3_B7(5)	Y	0.3082	0.3100	0.0300	-0.0300	-0.0018	-
31v 3_C8	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
44m 3_B7	X	0.3093	0.3100	0.0300	-0.0300	0.0007	
55 3_B2	Y	0.4992	0.5000	0.0050	-0.0010	-0.0008	---
56a 4_A6	D	0.2037	0.2010	0.0050	-0.0010	0.0027	
57 4_C3	Y	1.1286	1.1300	0.0300	-0.0300	-0.0014	-
58a 4_B3	X	0.3133	0.3100	0.0300	-0.0300	0.0033	
59a1 4_A5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	---
60a 4_A5	Y	0.3448	0.3440	0.0100	-0.0100	-0.0008	-
59a2 4_A5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	---
61a 4_A5_Y	Dist	0.6875	0.6880	0.0100	-0.0100	-0.0005	-
56b 4_A6	D	0.2034	0.2010	0.0050	-0.0010	0.0024	
58b1 4_B3_3d	Dist	0.3040	0.3100	0.0300	-0.0300	-0.0060	-
58b2 4_B3_3d	Dist	0.3029	0.3100	0.0300	-0.0300	-0.0071	-
62 4_C3	Y	3.7121	3.7100	0.0300	-0.0300	0.0021	
59b1 4_A5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	---
60b 4_A5	Y	0.3474	0.3440	0.0100	-0.0100	-0.0034	-
59b2 4_A5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	---
61b 4_A5_R	Dist	0.6878	0.6880	0.0100	-0.0100	-0.0002	-
56c 4_A6	D	0.2043	0.2010	0.0050	-0.0010	0.0033	
58c 4_B3	Y	0.3128	0.3100	0.0300	-0.0300	0.0028	
63 4_B3	X	-2.7527	-2.7500	0.0300	-0.0300	-0.0027	-
59c1 4_A5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	---
60c 4_A5	X	-0.3397	-0.3440	0.0100	-0.0100	0.0043	
59c2 4_A5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	---
61c 4_A5_X	Dist	0.6878	0.6880	0.0100	-0.0100	-0.0002	-
56d 4_A6	D	0.2037	0.2010	0.0050	-0.0010	0.0027	
58d 4_B3	Y	0.3099	0.3100	0.0300	-0.0300	-0.0001	-
64 4_B3	X	-7.0059	-7.0000	0.0100	-0.0100	-0.0059	---
59d1 4_A5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	---
60d 4_A5	X	-0.3407	-0.3440	0.0100	-0.0100	0.0033	
59d2 4_A5	D	0.0981	0.0980	0.0040	-0.0010	0.0001	---
61d 4_A5_Y	Dist	0.6881	0.6880	0.0100	-0.0100	0.0001	

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Part Number

D4500-1 P

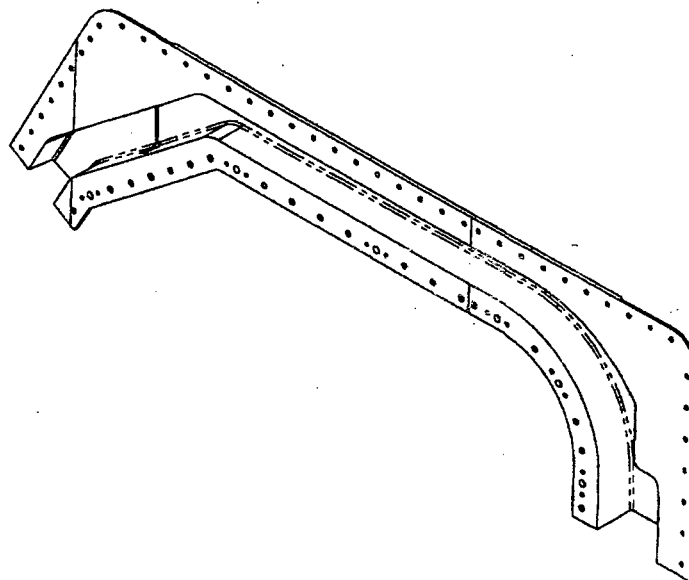
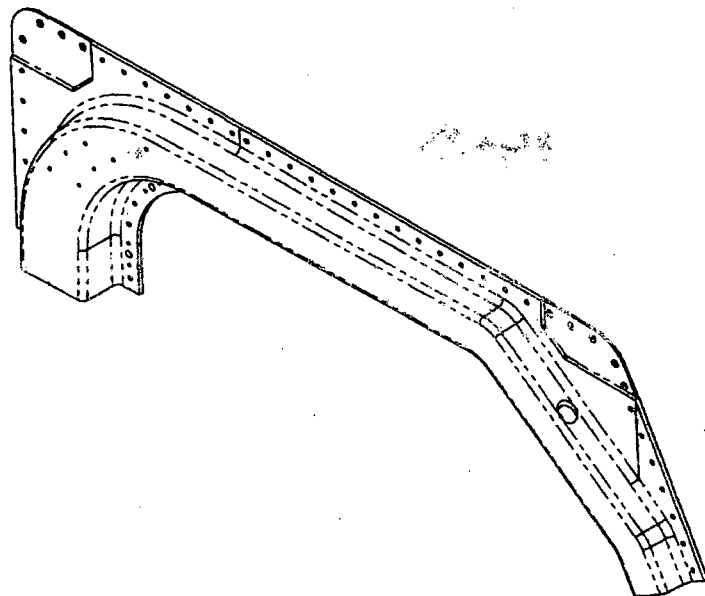
Serial # 001

Time 1:36:45 pm

Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<-- -->
56e 4_A6	D	0.2038	0.2010	0.0050	-0.0010	0.0028	--
58e 4_B3	Y	0.3103	0.3100	0.0300	-0.0300	0.0003	
65 4_B4	X	-12.0062	-12.0000	0.0100	-0.0100	-0.0062	--
59e1 4_A5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	--
60e 4_A5	X	-0.3405	-0.3440	0.0100	-0.0100	0.0035	--
59e2 4_A5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	--
61e 4_A5_X	Dist	0.6878	0.6880	0.0100	-0.0100	-0.0002	
56f 4_A6	D	0.2043	0.2010	0.0050	-0.0010	0.0033	--
66 4_B5	X	-17.0969	-17.0900	0.0100	-0.0100	-0.0069	--
67 4_B3	Y	1.3270	1.3100	0.0300	-0.0300	0.0170	--
59f1 4_A5	D	0.0979	0.0980	0.0040	-0.0010	-0.0001	--
60f 4_A7	X	-0.3418	-0.3440	0.0100	-0.0100	0.0022	
59f2 4_A5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	--
61f 4_A5_R	Dist	0.6880	0.6880	0.0100	-0.0100	0.0000	

## Manually Inspected Dims

67	2_B6	.125 typ. wall thickness	<u>.1225/.1255</u>
68	2_A5	.125 typ. flange thk	<u>.123/.134</u>
69	2_B2	R.06	<u>R.067P.</u>
70	2_B2	R.16	<u>R.1674P.</u>
71	2_D6	2.87 dim	<u>2.869</u>
72	2_C7	1.85 dim	<u>1.845</u>
73	2_C7	1.14 dim	<u>1.135</u>
74	2_C6	135 deg angle	<u>135°</u>
75	2_D4	18.62 dim	<u>18.622</u>
76	2_D1	1.43 dim	<u>1.425</u>
77	2_C1	0.83 dim	<u>.825</u>
78	2_C2	143 deg angle	<u>143°</u>
79	2_D2	R0.12 typ	<u>R.1257P.</u>
80	3_C8	CSK .220 dia x 100 deg	<u>.218/.220 x 100°</u>
81	3_D1	CSK .220 dia x 100 deg	<u>.218/.220 x 100°</u>
82	3_A5	0.062 dim typ.	<u>.062/.066</u>
83	3_A5	R0.063 typ.	<u>.0637P.</u>
84	4_C4	CSK .170 dia x 100 deg	<u>.170/.172 x 100°</u>
85	4_A5	CSK .120 dia x 100 deg	<u>.120/.125 x 100°</u>
86	1_A8	Break sharp edges .005-.010max	<u>0.0</u>



**D4500-1 BELL DOOR HEADER (LH)**

**NOTES:**

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR  
PER QQ-A-225/8 OR AMS-QQ-A-225/8  
(OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221  
REF DART SPEC M6061T68
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
PRIME TEMPO GREY (4.2.1.3.2) PER DART QSI 005 4.2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.78 lbs
- 8) RAW MATERIAL SURFACE FINISH SUFFICIENT FOR THIS PART  
(NOT NECESSARY TO FACE MATERIAL)
- 9) ALL NON DIMENSIONED FEATURES PER CAD FILE 'D4500-1-REV.D.STP'

**RELEASED**  
2013-01-10

D	SEE SHY 2 ZONE C8 ROCKET ADDED TO AFT AREA OF FLANGE SIMILAR TO THE POCKET ON THE FWD AREA OF THE FLANGE. DONE TO FACILITATE OPERATION OF DOOR MECHANISM SAME POCKET ADDED TO -2 PART.	AJS	12.12.03
C	ADDED -2 (RH CONFIGURATION). B8-3 0.38 DBM TYP OUTSIDE PATTERN NOTE DELETED (DRAFTING ERROR). C4-4 Ø0.128 THRU WAS Ø0.225 (DRAFTING ERROR) CSK WAS 0.170. SEE DETAIL C Ø0.201 HOLE WAS Ø0.194 (EXPANDED FOR FLOATING NUTPLATE).	AJS	12.10.10
B	COMPLETE REDESIGN.	AJS	12.09.11
A	NEW ISSUE	AJS	12.03.02
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	AP	DRAWING NO.	REV. D
MFG. APPR.	AP	D4500	SHEET 1 OF 8
APPROVED	AP	TITLE	SCALE
DE APPR.	AP	BELL DOOR HEADER	NTS
DATE	12.12.03	COPYRIGHT © 2013 BY DART AEROSPACE LTD This document is the property of Dart Aerospace Ltd. It is to be used only for the purpose specified on the drawing and is not to be reproduced or used for any other purpose without written permission from Dart Aerospace Ltd.	

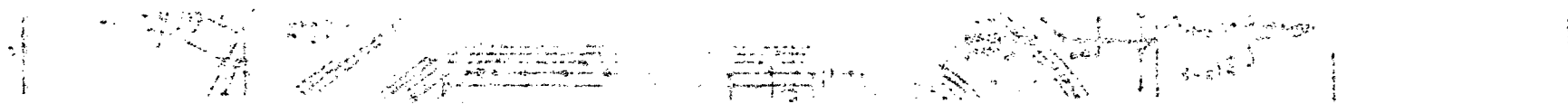
1. The first part of the document is a list of the names of the persons who were present at the meeting. The names are listed in alphabetical order.

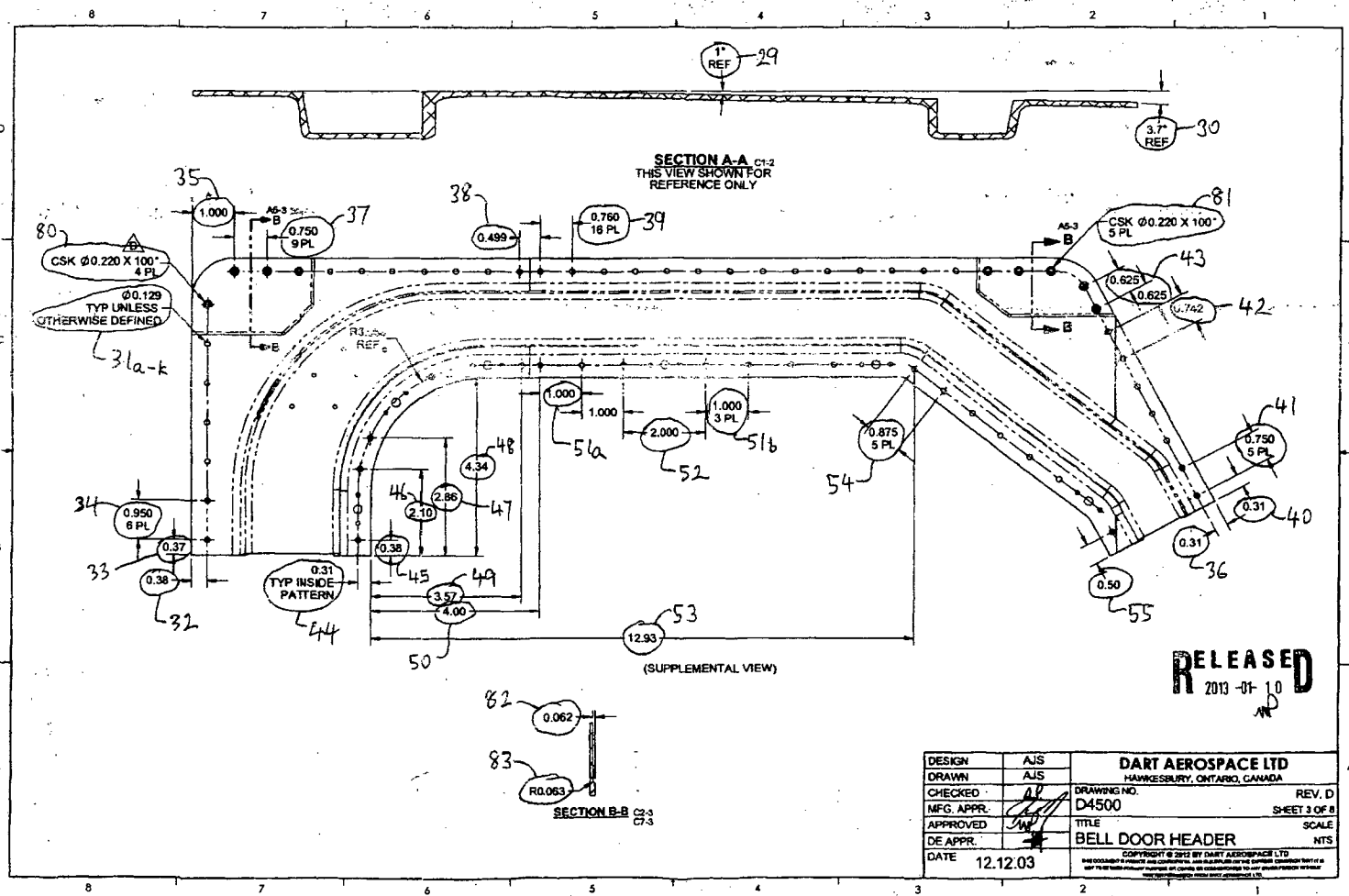
2. The second part of the document is a list of the topics that were discussed at the meeting. The topics are listed in alphabetical order.

3. The third part of the document is a list of the actions that were taken at the meeting. The actions are listed in alphabetical order.

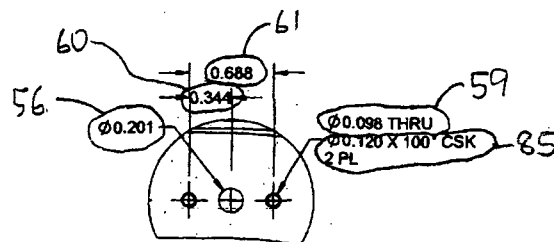
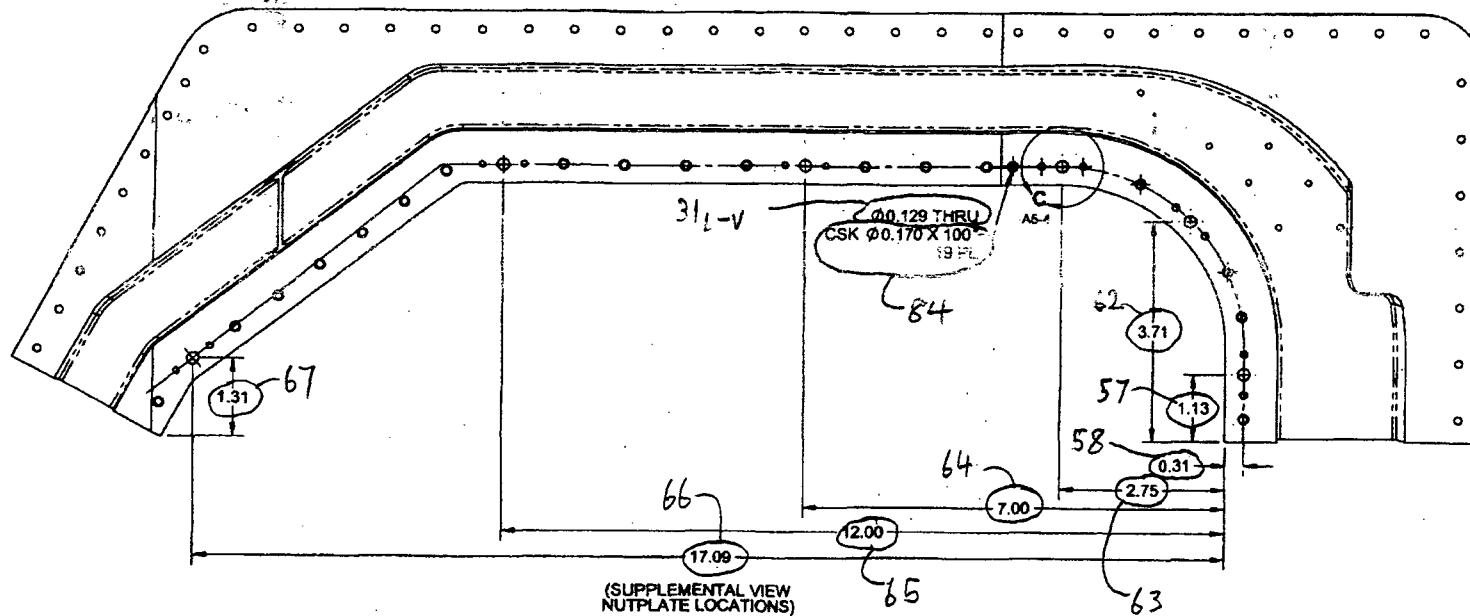








DESIGN	AJS	<b>DART AEROSPACE LTD</b>	
DRAWN	AJS	HAMMERSBURY, ONTARIO, CANADA	
CHECKED	AP	DRAWING NO.	REV. D
MFG. APPR.	AP	D4500	SHEET 3 OF 8
APPROVED	AP	TITLE	SCALE
DE APPR.	AP	BELL DOOR HEADER	NTS
DATE	12.12.03	<small>           COPYRIGHT © 2012 BY DART AEROSPACE LTD            ALL RIGHTS RESERVED. NO PART OF THIS DRAWING MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.         </small>	



DETAIL C CS-4  
NUTPLATE HOLE DETAIL 6 PL  
SCALE 2X

**RELEASED**  
2013-01-10  
WP

DESIGN	AJS	<b>DART AEROSPACE LTD</b>	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AR	DRAWING NO.	REV. D
MFG. APPR.		D4500	SHEET 4 OF 8
APPROVED	W	TITLE	SCALE
DE APPR.	S	BELL DOOR HEADER	NTS
DATE	12.12.03	<small>COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS UNCLASSIFIED AND IS AVAILABLE TO THE PUBLIC. IT IS NOT TO BE USED FOR ANY PURPOSE OR REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT PERMISSION FROM DART AEROSPACE LTD.</small>	



600 O'CONNOR DRIVE, KINGSTON, ONTARIO K7P 1N3

PHONE: (613) 384-1662

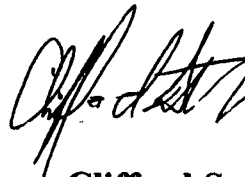
FAX: (613) 384-2997

## CERTIFICATE OF COMPLIANCE

CUSTOMER: Dart Aerospace Ltd.		DATE: May 23 2013	
		P.O.# PO19474	
		WEJAY JOB# 36234	
<p>I hereby certify that the following material has been inspected/tested and conforms to the requirements and specifications as stated in your contract and as noted below. Any exceptions will be listed as NCR items.</p>			
PART NO.	QTY.	PROCESS (ES)	SPECIFICATION / REV
D4500-1P 'Bell Door Header (LH)'	5	Machined complete per drawing req'ts.	D4500 / rev. D
Note: 1) Material supplied by 'Dart Aerospace'			

Records of Inspection/Test will be retained for 5 years minimum.

Yours truly,

  
**Clifford Smith**  
Authorized Q.A. Signatory





Customer Dart Aerospace Ltd. Customer P.O. P017497  
 Drawing # D4500 Drawing rev D  
 Part Number D4500-1 P E.C.O. --  
 Part Name Bell Door Header (LH) Material Alum. Alloy 6061-T6511  
 Serial # 001 Inspected by Cliff Smith  
 Job # 36234 Signature:



## Overall Result

All Characteristics:

299

Out of tolerance:

0

Over Warning Limit:

0

Not Calculated:

0

Comment: Note: Material supplied by DART Aerospace Ltd

1st ARTICLE

Feature	ID	Actual	Nominal	Pos Tol.	Neg Tol.	Deviation	<-- -->
1 2_C8	Y	-7.1988	-7.2000	0.0300	-0.0300	0.0012	-
Inside bott. face_flat	GDT Flat	0.0017	0.0000	0.0100		0.0017	-
2 2_A6	X	-4.2469	-4.2500	0.0300	-0.0300	0.0031	-
3 2_B3_X	Dist	17.6122	17.6100	0.0300	-0.0300	0.0022	-
3a 2_B4	CartDist	4.3135	4.3100	0.0300	-0.0300	0.0035	-
4 2_A7	Z	1.3528	1.3510	0.0100	-0.0100	0.0018	-
5 2_A6_X	Dist	0.8790	0.8800	0.0300	-0.0300	-0.0010	-
6 2_A6_X	Dist	2.1210	2.1200	0.0300	-0.0300	0.0010	-
7 2_A6	A	96.9475	97.0000	0.5000	-0.5000	-0.0525	-
8 2_B5_Y	Dist	1.5649	1.5600	0.0300	-0.0300	0.0049	-
9 2_C5	R	2.7512	2.7500	0.0300	-0.0300	0.0012	-
10a 2_B2	D	0.5000	0.5000	0.0060	-0.0010	0.0000	--
10b 2_B2	D	0.5004	0.5000	0.0060	-0.0010	0.0004	--
11 2_B7	X	-1.7725	-1.7760	0.0100	-0.0100	0.0035	-
12 2_A7	Z	-0.6832	-0.6830	0.0100	-0.0100	-0.0002	-
13 2_B1	Z	0.3727	0.3730	0.0100	-0.0100	-0.0003	-
14 2_B4	X	-18.1519	-18.1500	0.0100	-0.0100	-0.0019	-
15a 2_C5	D	0.0977	0.0980	0.0040	-0.0010	-0.0003	--
16 2_D7	X	-2.3398	-2.3400	0.0300	-0.0300	0.0002	-
17a 2_B7	Y	3.5706	3.5700	0.0300	-0.0300	0.0006	-
15b 2_C5	D	0.0978	0.0980	0.0040	-0.0010	-0.0002	--
17b 2_B7	Y	3.5709	3.5700	0.0300	-0.0300	0.0009	-
18 2_C6_X	Dist	1.0345	1.0340	0.0100	-0.0100	0.0005	-
15c 2_C5	D	0.0977	0.0980	0.0040	-0.0010	-0.0003	--
19 2_D6	X	-2.8807	-2.8800	0.0300	-0.0300	-0.0007	-
20a 2_C7_Y	Dist	0.7568	0.7560	0.0100	-0.0100	0.0008	-
15d 2_C5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	--
20b 2_C7_Y	Dist	0.7569	0.7560	0.0100	-0.0100	0.0009	-
21 2_C6_X	Dist	1.0136	1.0130	0.0100	-0.0100	0.0006	-
15e 2_C5	D	0.0977	0.0980	0.0040	-0.0010	-0.0003	--
22 2_D6	X	-3.5748	-3.5800	0.0300	-0.0300	0.0052	-
23a 2_C7_Y	Dist	0.6189	0.6190	0.0100	-0.0100	-0.0001	-

Measurement Plan D4500 rev PB2

Date May 22, 2013

2



Part Number D4500-1 P

Serial # 001

Time 1:38:45 pm

Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<-- -->
15f 2_C5	D	0.0978	0.0980	0.0040	-0.0010	-0.0002	---
23b 2_C7_Y	Dist	0.6191	0.6190	0.0100	-0.0100	0.0001	+
24 2_D6_X	Dist	0.9929	0.9930	0.0100	-0.0100	-0.0001	-
15g 2_C5	D	0.0979	0.0980	0.0040	-0.0010	-0.0001	---
25 2_D6	X	-5.7095	-5.7100	0.0300	-0.0300	0.0005	+
26 2_C7	Y	5.8463	5.8500	0.0300	-0.0300	-0.0037	-
27 2_D8	A2	2.3697	2.4000	0.5000	-0.5000	-0.0303	-
28 2_D4	X	-24.3040	-24.3100	0.0300	-0.0300	0.0060	+
29 3_D4	A1	-1.0108	-1.0000	0.5000	-0.5000	-0.0108	-
30 3_D1	A1	-3.7480	-3.7000	0.5000	-0.5000	-0.0480	-
31a 3_C8	D	0.1285	0.1290	0.0050	-0.0010	-0.0005	---
32a 3_B7	X	-0.3718	-0.3800	0.0300	-0.0300	0.0082	+
33 3_B7	Y	0.3728	0.3700	0.0300	-0.0300	0.0028	+
31b 3_C8(1)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31b 3_C8(2)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31b 3_C8(3)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31b 3_C8(4)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31b 3_C8(5)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31b 3_C8(6)	D	0.1288	0.1290	0.0050	-0.0010	-0.0002	---
32b 3_B7(1)	X	-0.3729	-0.3800	0.0300	-0.0300	0.0071	+
32b 3_B7(2)	X	-0.3729	-0.3800	0.0300	-0.0300	0.0071	+
32b 3_B7(3)	X	-0.3729	-0.3800	0.0300	-0.0300	0.0071	+
32b 3_B7(4)	X	-0.3729	-0.3800	0.0300	-0.0300	0.0071	+
32b 3_B7(5)	X	-0.3728	-0.3800	0.0300	-0.0300	0.0072	+
32b 3_B7(6)	X	-0.3726	-0.3800	0.0300	-0.0300	0.0074	+
34 3_B7(1)	Y	0.9486	0.9500	0.0300	-0.0300	-0.0014	-
34 3_B7(2)	Y	1.9085	1.9000	0.0300	-0.0300	-0.0015	-
34 3_B7(3)	Y	2.8487	2.8500	0.0300	-0.0300	-0.0013	-
34 3_B7(4)	Y	3.7986	3.8000	0.0300	-0.0300	-0.0014	-
34 3_B7(5)	Y	4.7485	4.7500	0.0300	-0.0300	-0.0015	-
34 3_B7(6)	Y	5.6987	5.7000	0.0300	-0.0300	-0.0013	-
31c 3_C8	D	0.1287	0.1290	0.0050	-0.0010	-0.0003	---
35 3_D7	X	-0.9978	-1.0000	0.0100	-0.0100	0.0022	+
36a 3_B1	Y	-0.3086	-0.3100	0.0300	-0.0300	0.0014	+
31d 3_C8(1)	D	0.1287	0.1290	0.0050	-0.0010	-0.0003	---
31d 3_C8(2)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31d 3_C8(3)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31d 3_C8(4)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31d 3_C8(5)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31d 3_C8(6)	D	0.1285	0.1290	0.0050	-0.0010	-0.0005	---
31d 3_C8(7)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31d 3_C8(8)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31d 3_C8(9)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
37 3_D7(1)	X	-0.7501	-0.7500	0.0010	-0.0010	-0.0001	-
37 3_D7(2)	X	-1.5001	-1.5000	0.0010	-0.0010	-0.0001	-

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Measurement Plan D4500 rev PB2

Date May 22, 2013

3



Part Number D4500-1 P

Serial # 001

Time 1:36:45 pm

Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<-- -->
37 3_D7(3)	X	-2.2501	-2.2500	0.0010	-0.0010	-0.0001	-
37 3_D7(4)	X	-3.0000	-3.0000	0.0010	-0.0010	0.0000	-
37 3_D7(5)	X	-3.7500	-3.7500	0.0010	-0.0010	0.0000	-
37 3_D7(6)	X	-4.5000	-4.5000	0.0010	-0.0010	0.0000	-
37 3_D7(7)	X	-5.2499	-5.2500	0.0010	-0.0010	0.0001	-
37 3_D7(8)	X	-5.9999	-6.0000	0.0010	-0.0010	0.0001	-
37 3_D7(9)	X	-6.7499	-6.7500	0.0010	-0.0010	0.0001	-
36b 3_B1(1)	Y	-0.3091	-0.3100	0.0300	-0.0300	0.0009	-
36b 3_B1(2)	Y	-0.3097	-0.3105	0.0300	-0.0300	0.0009	-
36b 3_B1(3)	Y	-0.3102	-0.3111	0.0300	-0.0300	0.0009	-
36b 3_B1(4)	Y	-0.3107	-0.3116	0.0300	-0.0300	0.0010	-
36b 3_B1(5)	Y	-0.3110	-0.3122	0.0300	-0.0300	0.0012	-
36b 3_B1(6)	Y	-0.3114	-0.3127	0.0300	-0.0300	0.0013	-
36b 3_B1(7)	Y	-0.3120	-0.3133	0.0300	-0.0300	0.0013	-
36b 3_B1(8)	Y	-0.3124	-0.3138	0.0300	-0.0300	0.0014	-
36b 3_B1(9)	Y	-0.3129	-0.3144	0.0300	-0.0300	0.0015	-
31e 3_C8	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
38 3_C5	X	-0.4989	-0.4990	0.0100	-0.0100	0.0001	-
36c 3_B1	Y	-0.3140	-0.3100	0.0300	-0.0300	-0.0040	-
31f 3_C8(1)	D	0.1285	0.1290	0.0050	-0.0010	-0.0005	---
31f 3_C8(2)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(3)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(4)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(5)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(6)	D	0.1285	0.1290	0.0050	-0.0010	-0.0005	---
31f 3_C8(7)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(8)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(9)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(10)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(11)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(12)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(13)	D	0.1285	0.1290	0.0050	-0.0010	-0.0005	---
31f 3_C8(14)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(15)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31f 3_C8(16)	D	0.1287	0.1290	0.0050	-0.0010	-0.0003	---
36d 3_B1(1)	Y	-0.3127	-0.3150	0.0300	-0.0300	0.0023	-
36d 3_B1(2)	Y	-0.3126	-0.3155	0.0300	-0.0300	0.0029	-
36d 3_B1(3)	Y	-0.3125	-0.3160	0.0300	-0.0300	0.0035	-
36d 3_B1(4)	Y	-0.3124	-0.3164	0.0300	-0.0300	0.0040	-
36d 3_B1(5)	Y	-0.3124	-0.3169	0.0300	-0.0300	0.0045	-
36d 3_B1(6)	Y	-0.3123	-0.3174	0.0300	-0.0300	0.0050	-
36d 3_B1(7)	Y	-0.3122	-0.3179	0.0300	-0.0300	0.0056	-
36d 3_B1(8)	Y	-0.3121	-0.3183	0.0300	-0.0300	0.0062	-
36d 3_B1(9)	Y	-0.3121	-0.3188	0.0300	-0.0300	0.0067	-
36d 3_B1(10)	Y	-0.3121	-0.3193	0.0300	-0.0300	0.0072	-





Measurement Plan D4500 rev PB2

Date May 22, 2013

4




Part Number D4500-1 P

Serial # 001

Time 1:36:45 pm

Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<-- -->
36d 3_B1(11)	Y	-0.3120	-0.3198	0.0300	-0.0300	0.0078	└─
36d 3_B1(12)	Y	-0.3120	-0.3202	0.0300	-0.0300	0.0083	└─
36d 3_B1(13)	Y	-0.3120	-0.3207	0.0300	-0.0300	0.0087	└─
36d 3_B1(14)	Y	-0.3119	-0.3212	0.0300	-0.0300	0.0093	└─
36d 3_B1(15)	Y	-0.3117	-0.3217	0.0300	-0.0300	0.0100	└─
36d 3_B1(16)	Y	-0.3116	-0.3221	0.0300	-0.0300	0.0105	└─
39 3_C5(1)	X	-0.7609	-0.7600	0.0100	-0.0100	-0.0009	─┐
39 3_C5(2)	X	-1.5210	-1.5200	0.0100	-0.0100	-0.0010	─┐
39 3_C5(3)	X	-2.2810	-2.2800	0.0100	-0.0100	-0.0010	─┐
39 3_C5(4)	X	-3.0409	-3.0400	0.0100	-0.0100	-0.0009	─┐
39 3_C5(5)	X	-3.8010	-3.8000	0.0100	-0.0100	-0.0010	─┐
39 3_C5(6)	X	-4.5610	-4.5600	0.0100	-0.0100	-0.0010	─┐
39 3_C5(7)	X	-5.3209	-5.3200	0.0100	-0.0100	-0.0009	─┐
39 3_C5(8)	X	-6.0810	-6.0800	0.0100	-0.0100	-0.0010	─┐
39 3_C5(9)	X	-6.8410	-6.8400	0.0100	-0.0100	-0.0010	─┐
39 3_C5(10)	X	-7.6009	-7.6000	0.0100	-0.0100	-0.0009	─┐
39 3_C5(11)	X	-8.3609	-8.3600	0.0100	-0.0100	-0.0009	─┐
39 3_C5(12)	X	-9.1209	-9.1200	0.0100	-0.0100	-0.0009	─┐
39 3_C5(13)	X	-9.8808	-9.8800	0.0100	-0.0100	-0.0008	─┐
39 3_C5(14)	X	-10.6407	-10.6400	0.0100	-0.0100	-0.0007	─┐
39 3_C5(15)	X	-11.4006	-11.4000	0.0100	-0.0100	-0.0006	─┐
39 3_C5(16)	X	-12.1606	-12.1600	0.0100	-0.0100	-0.0006	─┐
31g 3_C8	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	─┐
36e 3_B1	X	0.3046	0.3100	0.0300	-0.0300	-0.0054	─┐
40 3_B1	Y	0.3094	0.3100	0.0300	-0.0300	-0.0006	─┐
31h 3_C8(1)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	─┐
31h 3_C8(2)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	─┐
31h 3_C8(3)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	─┐
31h 3_C8(4)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	─┐
31h 3_C8(5)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	─┐
36f 3_C8(1)	X	0.3053	0.3100	0.0300	-0.0300	-0.0047	─┐
36f 3_C8(2)	X	0.3052	0.3100	0.0300	-0.0300	-0.0038	─┐
36f 3_C8(3)	X	0.3057	0.3100	0.0300	-0.0300	-0.0033	─┐
36f 3_C8(4)	X	0.3074	0.3100	0.0300	-0.0300	-0.0026	─┐
36f 3_C8(5)	X	0.3078	0.3100	0.0300	-0.0300	-0.0022	─┐
41 3_B1(1)	Y	0.7505	0.7500	0.0100	-0.0100	0.0005	└─
41 3_B1(2)	Y	1.5005	1.5000	0.0100	-0.0100	0.0005	└─
41 3_B1(3)	Y	2.2507	2.2500	0.0100	-0.0100	0.0007	└─
41 3_B1(4)	Y	3.0009	3.0000	0.0100	-0.0100	0.0009	└─
41 3_B1(5)	Y	3.7510	3.7500	0.0100	-0.0100	0.0010	└─
31i 3_C8	D	0.1286	0.1290	0.0100	-0.0100	-0.0004	─┐
36g 3_B1	X	0.3138	0.3100	0.0300	-0.0300	0.0038	└─
42 3_C1	Y	0.7410	0.7420	0.0100	-0.0100	-0.0010	─┐
31j 3_C8	D	0.1291	0.1290	0.0100	-0.0100	0.0001	└─
36h 3_B1	X	0.3138	0.3100	0.0300	-0.0300	0.0038	└─

Measurement Plan D4500 rev PB2				Date	May 22, 2013	5		
Part Number D4500-1 P		Serial # 001		Time	1:36:45 pm			
Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<-- -->	
33a 3_C1	Y	0.6253	0.6250	0.0100	-0.0100	0.0003		
31k 3_C8	D	0.1291	0.1290	0.0100	-0.0100	0.0001		
36i 3_B1	X	0.3130	0.3100	0.0300	-0.0300	0.0030		
43b 3_C1	Y	0.6246	0.6250	0.0100	-0.0100	-0.0004		
31L 3_C8	D	0.1287	0.1290	0.0050	-0.0010	-0.0003	---	
44a 3_B7	X	0.3170	0.3100	0.0300	-0.0300	0.0070		
45 3_B6	Y	0.3779	0.3800	0.0300	-0.0300	-0.0021		
31m 3_C8	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---	
46 3_B6	Y	2.0985	2.1000	0.0300	-0.0300	-0.0015		
44b 3_B7_R	Dist	0.3156	0.3100	0.0300	-0.0300	0.0056		
31n 3_C8	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---	
47 3_B6	Y	2.8610	2.8600	0.0300	-0.0300	0.0010		
44c 3_B7_R	Dist	0.3155	0.3100	0.0300	-0.0300	0.0055		
31o 3_C8	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---	
48 3_B6	Y	4.3427	4.3400	0.0300	-0.0300	0.0027		
44d 3_B7_R	Dist	0.3138	0.3100	0.0300	-0.0300	0.0038		
31p 3_C8	D	0.1285	0.1290	0.0050	-0.0010	-0.0005	---	
49 3_B6	X	-3.5650	-3.5700	0.0300	-0.0300	0.0050		
44f 3_B7	Y	0.3116	0.3100	0.0300	-0.0300	0.0016		
31q 3_C8	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---	
50 3_B6	X	-4.0024	-4.0000	0.0300	-0.0300	-0.0024		
44g 3_B7	Y	0.3089	0.3100	0.0300	-0.0300	-0.0011		
31r 3_C8(1)	D	0.1285	0.1290	0.0050	-0.0010	-0.0005	---	
31r 3_C8(2)	D	0.1285	0.1290	0.0050	-0.0010	-0.0005	---	
51a 3_C5(1)	X	-1.0001	-1.0000	0.0300	-0.0300	-0.0001		
51a 3_C5(2)	X	-2.0002	-2.0000	0.0300	-0.0300	-0.0002		
44h 3_B7(1)	Y	0.3091	0.3100	0.0300	-0.0300	-0.0009		
44h 3_B7(2)	Y	0.3093	0.3100	0.0300	-0.0300	-0.0007		
31rr 3_C8	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---	
52 3_C5_X	Dist	1.9995	2.0000	0.0100	-0.0100	-0.0005		
44hh 3_B7	Y	0.3095	0.3100	0.0300	-0.0300	-0.0005		
31s 3_C8(1)	D	0.1285	0.1290	0.0050	-0.0010	-0.0005	---	
31s 3_C8(2)	D	0.1285	0.1290	0.0050	-0.0010	-0.0005	---	
31s 3_C8(3)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---	
53 3_B5	X	-12.9294	-12.9300	0.0300	-0.0300	0.0006		
51b 3_C5(1)	X	-1.0002	-1.0000	0.0300	-0.0300	-0.0002		
51b 3_C5(2)	X	-2.0003	-2.0000	0.0300	-0.0300	-0.0003		
51b 3_C5(3)	X	-3.0003	-3.0000	0.0300	-0.0300	-0.0003		
44i 3_B7(1)	Y	0.3095	0.3100	0.0300	-0.0300	-0.0005		
44i 3_B7(2)	Y	0.3097	0.3100	0.0300	-0.0300	-0.0003		
44i 3_B7(3)	Y	0.3097	0.3100	0.0300	-0.0300	-0.0003		
31t 3_C8	D	0.1286	0.1290	0.0300	-0.0300	-0.0004		
44j 3_B7	CartDist	0.3073	0.3100	0.0300	-0.0300	-0.0027		
31u 3_C9(1)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---	
31u 3_C9(2)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---	

Measurement Plan D4500 rev PB2

Date May 22, 2013

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Part Number D4500-1 P

Serial # 001

Time 1:36:45 pm

Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<-- -->
31u 3_C9(3)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31u 3_C9(4)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
31u 3_C9(5)	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
54 3_C3(1)	X	-0.8750	-0.8750	0.0300	-0.0300	0.0000	
54 3_C3(2)	X	-1.7502	-1.7500	0.0300	-0.0300	-0.0002	-
54 3_C3(3)	X	-2.6253	-2.6250	0.0300	-0.0300	-0.0003	-
54 3_C3(4)	X	-3.5004	-3.5000	0.0300	-0.0300	-0.0004	-
54 3_C3(5)	X	-4.3755	-4.3750	0.0300	-0.0300	-0.0005	-
44k 3_B7(1)	Y	0.3082	0.3100	0.0300	-0.0300	-0.0018	-
44k 3_B7(2)	Y	0.3083	0.3100	0.0300	-0.0300	-0.0017	-
44k 3_B7(3)	Y	0.3082	0.3100	0.0300	-0.0300	-0.0018	-
44k 3_B7(4)	Y	0.3081	0.3100	0.0300	-0.0300	-0.0019	-
44k 3_B7(5)	Y	0.3082	0.3100	0.0300	-0.0300	-0.0018	-
31v 3_C8	D	0.1286	0.1290	0.0050	-0.0010	-0.0004	---
44m 3_B7	X	0.3093	-0.3100	0.0300	-0.0300	0.0007	-
55 3_B2	Y	0.4992	0.5000	0.0050	-0.0010	-0.0008	---
56a 4_A6	D	0.2037	0.2010	0.0050	-0.0010	0.0027	-
57 4_C3	Y	1.1286	1.1300	0.0300	-0.0300	-0.0014	-
58a 4_B3	X	0.3133	0.3100	0.0300	-0.0300	0.0033	-
59a1 4_A5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	---
60a 4_A5	Y	-0.3448	-0.3440	0.0100	-0.0100	-0.0008	-
59a2 4_A5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	---
61a 4_A5_Y	Dist	0.6875	0.6880	0.0100	-0.0100	-0.0005	-
56b 4_A6	D	0.2034	0.2010	0.0050	-0.0010	0.0024	-
58b1 4_B3_3d	Dist	0.3040	0.3100	0.0300	-0.0300	-0.0060	-
58b2 4_B3_3d	Dist	0.3029	0.3100	0.0300	-0.0300	-0.0071	-
62 4_C3	Y	3.7121	3.7100	0.0300	-0.0300	0.0021	-
59b1 4_A5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	---
60b 4_A5	Y	-0.3474	-0.3440	0.0100	-0.0100	-0.0034	-
59b2 4_A5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	---
61b 4_A5_R	Dist	0.6878	0.6880	0.0100	-0.0100	-0.0002	-
56c 4_A6	D	0.2043	0.2010	0.0050	-0.0010	0.0033	-
58c 4_B3	Y	0.3128	0.3100	0.0300	-0.0300	0.0028	-
63 4_B3	X	-2.7527	-2.7500	0.0300	-0.0300	-0.0027	-
59c1 4_A5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	---
60c 4_A5	X	-0.3397	-0.3440	0.0100	-0.0100	0.0043	-
59c2 4_A5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	---
61c 4_A5_X	Dist	0.6878	0.6880	0.0100	-0.0100	-0.0002	-
56d 4_A6	D	0.2037	0.2010	0.0050	-0.0010	0.0027	-
58d 4_B3	Y	0.3099	0.3100	0.0300	-0.0300	-0.0001	-
64 4_B3	X	-7.0059	-7.0000	0.0100	-0.0100	-0.0059	---
59d1 4_A5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	---
60d 4_A5	X	-0.3407	-0.3440	0.0100	-0.0100	0.0033	-
59d2 4_A5	D	0.0981	0.0980	0.0040	-0.0010	0.0001	---
64 4_A5_X	Dist	0.6884	0.6880	0.0100	-0.0100	0.0004	-

Measurement Plan D4500 rev PB2

Date May 22, 2013

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Part Number D4500-1 P

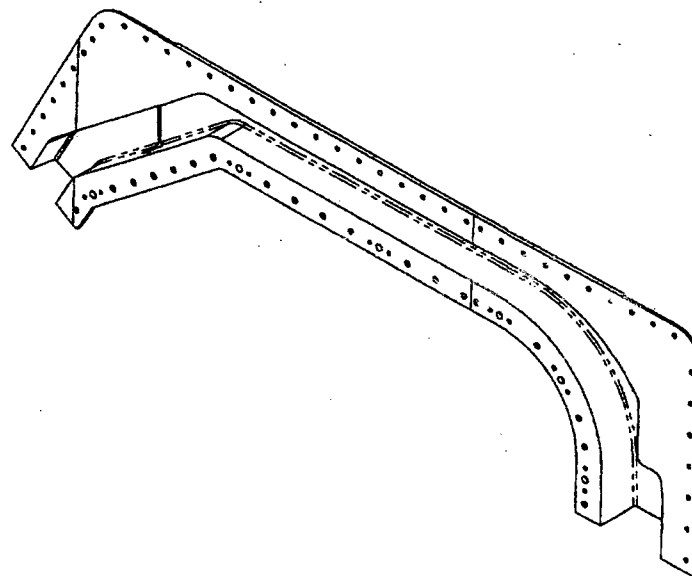
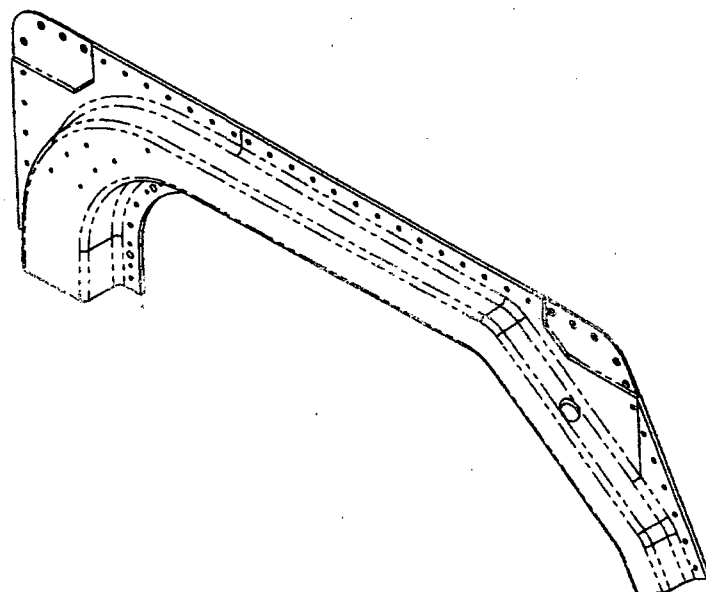
Serial # 001

Time 1:36:45 pm

Feature	ID	Actual	Nominal	pos Tol	neg Tol	Diff	<-- -->
56e 4_A6	D	0.2038	0.2010	0.0050	-0.0010	0.0028	--
58e 4_B3	Y	0.3103	0.3100	0.0300	-0.0300	0.0003	-
65 4_B4	X	-12.0062	-12.0000	0.0100	-0.0100	-0.0062	--
59e1 4_A5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	--
60e 4_A5	X	-0.3405	-0.3440	0.0100	-0.0100	0.0035	--
59e2 4_A5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	--
61e 4_A5_X	Dist	0.6878	0.6880	0.0100	-0.0100	-0.0002	-
56f 4_A6	D	0.2043	0.2010	0.0050	-0.0010	0.0033	--
66 4_B5	X	-17.0969	-17.0900	0.0100	-0.0100	-0.0069	--
67 4_B3	Y	1.3270	1.3100	0.0300	-0.0300	0.0170	--
59f1 4_A5	D	0.0979	0.0980	0.0040	-0.0010	-0.0001	--
60f 4_A7	X	-0.3418	-0.3440	0.0100	-0.0100	0.0022	-
59f2 4_A5	D	0.0980	0.0980	0.0040	-0.0010	0.0000	--
61f 4_A5_R	Dist	0.6880	0.6880	0.0100	-0.0100	0.0000	-

## Manually Inspected Dims

67	2_B6	.125 typ. wall thickness	<u>.1225/.1255</u>
68	2_A5	.125 typ. flange thk	<u>.123/.134</u>
69	2_B2	R.06	<u>R.067MP</u>
70	2_B2	R.16	<u>R.1674P</u>
71	2_D6	2.87 dim	<u>2.869</u>
72	2_C7	1.85 dim	<u>1.845</u>
73	2_C7	1.14 dim	<u>1.135</u>
74	2_C6	135 deg angle	<u>135°</u>
75	2_D4	18.62 dim	<u>18.622</u>
76	2_D1	1.43 dim	<u>1.425</u>
77	2_C1	0.83 dim	<u>.825</u>
78	2_C2	143 deg angle	<u>143°</u>
79	2_D2	R0.12 typ	<u>R.125MP</u>
80	3_C8	CSK .220 dia x 100 deg	<u>.218/.220 x 100°</u>
81	3_D1	CSK .220 dia x 100 deg	<u>.218/.220 x 100°</u>
82	3_A5	0.062 dim typ.	<u>.062/.066</u>
83	3_A5	R0.063 typ.	<u>.063MP</u>
84	4_C4	CSK .170 dia x 100 deg	<u>.170/.172 x 100°</u>
85	4_A5	CSK .120 dia x 100 deg	<u>.120/.125 x 100°</u>
86	1_A8	Break sharp edges .005-.010max	<u>O.K.</u>



**D4500-1 BELL DOOR HEADER (LH)**

**RELEASED**  
2013-01-10

**NOTES:**

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR  
PER QQ-A-225/8 OR AMS-QQ-A-225/8  
(OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221  
REF DART SPEC M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
PRIME TEMPO GREY (4.2.1.3.2) PER DART QSI 005 4.2
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 1.78 lbs
- 8) RAW MATERIAL SURFACE FINISH SUFFICIENT FOR THIS PART  
(NOT NECESSARY TO FACE MATERIAL)
- 9) ALL NON DIMENSIONED FEATURES PER CAD FILE "D4500-1-REV.D.STP"

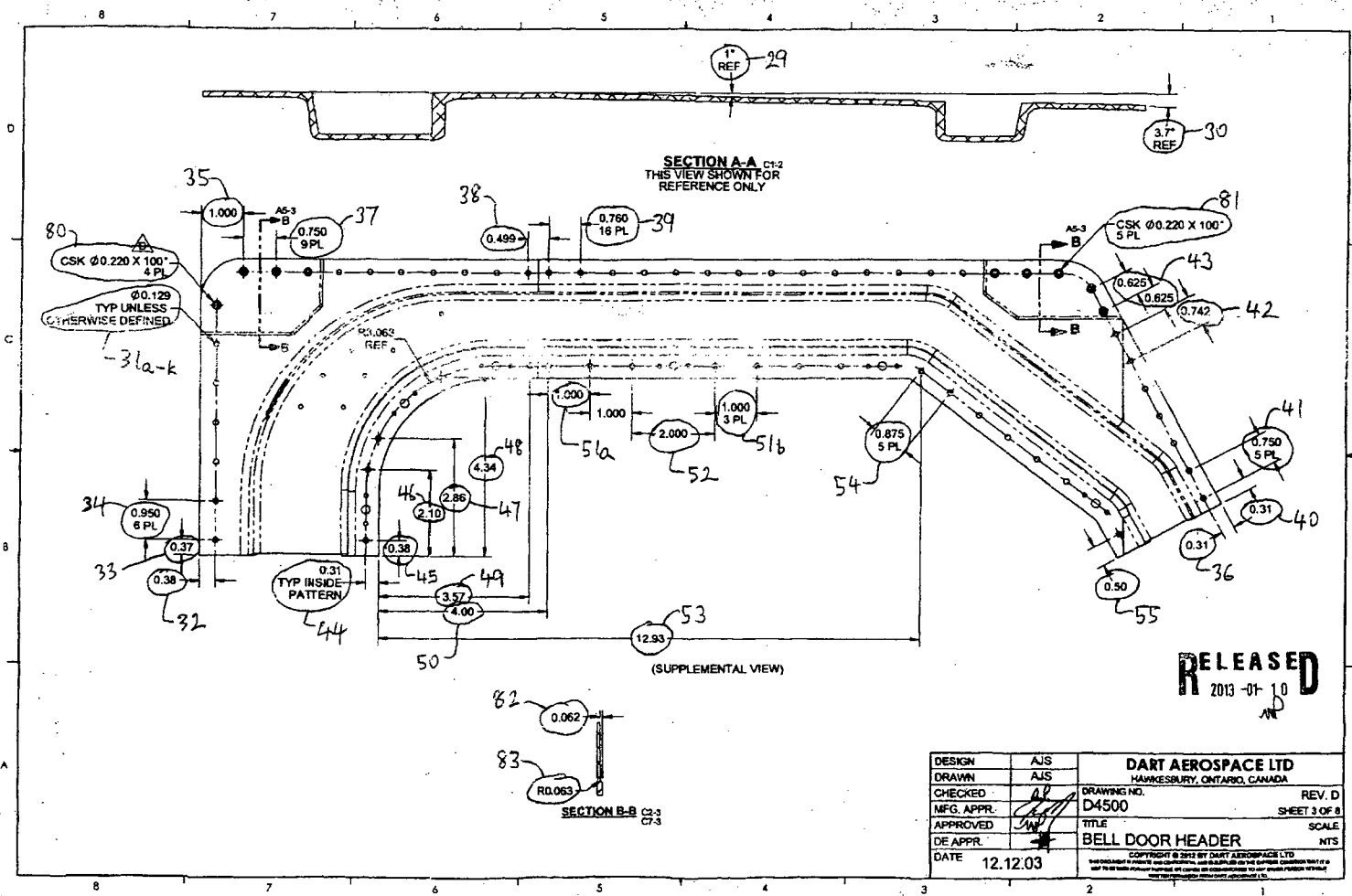
D	SEE SHIT 2 ZONE C8 POCKET ADDED TO AFT AREA OF FLANGE SIMILAR TO THE POCKET ON THE FWD AREA OF THE FLANGE. DONE TO FACILITATE OPERATION OF DOOR MECHANISM SAME POCKET ADDED TO -2 PART.	AJS	12.12.03
C	ADDED -2 (RH CONFIGURATION) B8-3 0.38 DMM TYP OUTSIDE PATTERN NOTE DELETED (DRAFTING ERROR) C4-4 Ø0.125 THRU WAS Ø0.225 (DRAFTING ERROR) CSK WAS 0.170 SEE DETAIL C Ø0.201 HOLE WAS Ø0.194 (EXPANDED FOR FLOATING NUTPLATE)	AJS	12.10.10
B	COMPLETE REDESIGN.	AJS	12.09.11
A	NEW ISSUE	AJS	12.03.02
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	AP	DRAWING NO.	REV. D
MFG. APPR.	AP	D4500	SHEET 1 OF 8
APPROVED	AP	TITLE	SCALE
DE APPR.	AP	BELL DOOR HEADER	NTS
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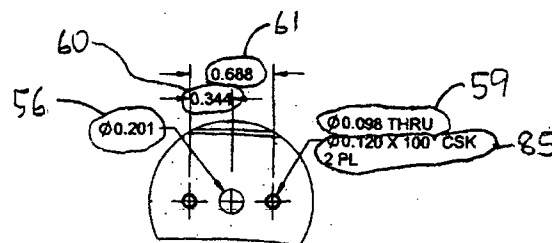
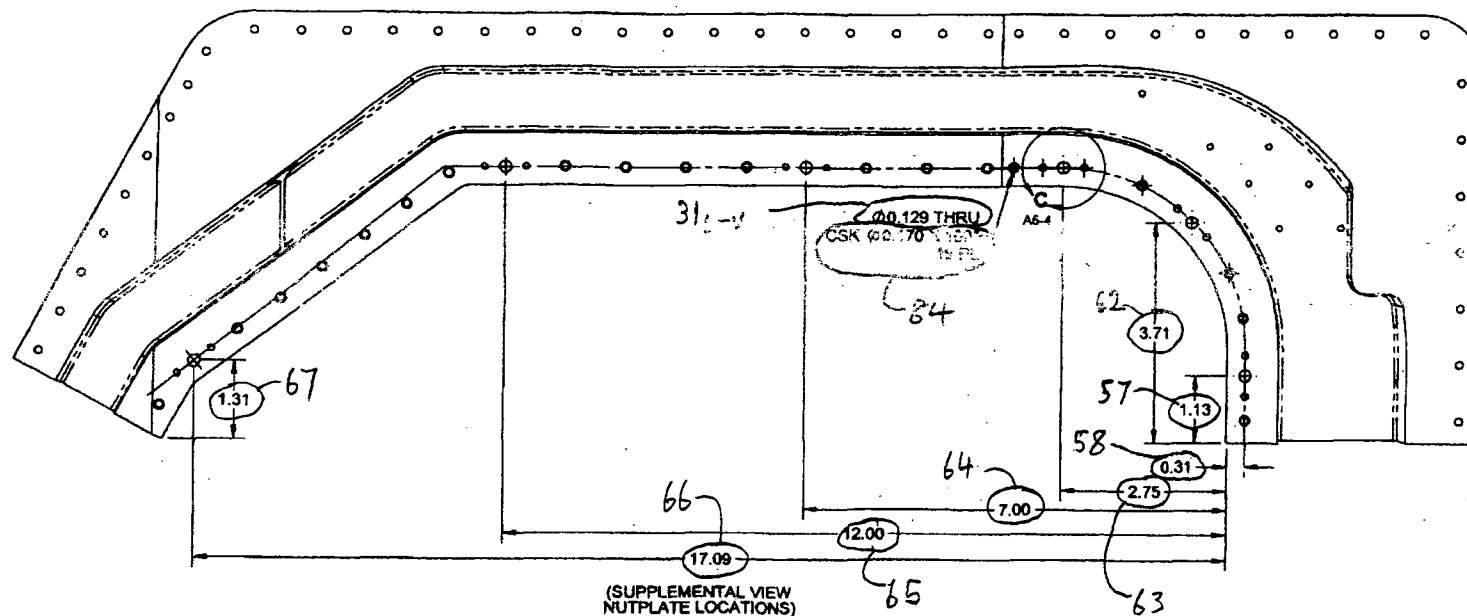








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DESIGN	AJS	DART AEROSPACE LTD	REV. D
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AP	DRAWING NO. D4500	SHEET 3 OF 8
MFG. APPR.		TITLE	SCALE
APPROVED		BELL DOOR HEADER	NTS
DE APPR.		COPYRIGHT © 2012 BY DART AEROSPACE LTD	
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DETAIL C C3-4  
NUTPLATE HOLE DETAIL 6 PL  
SCALE 2X

RELEASED  
2013-01-10  
WP

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AR	DRAWING NO.	REV. D
MFG. APPR.		D4500	SHEET 4 OF 8
APPROVED	WJ	TITLE	SCALE
DE APPR.		BELL DOOR HEADER	NTS
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